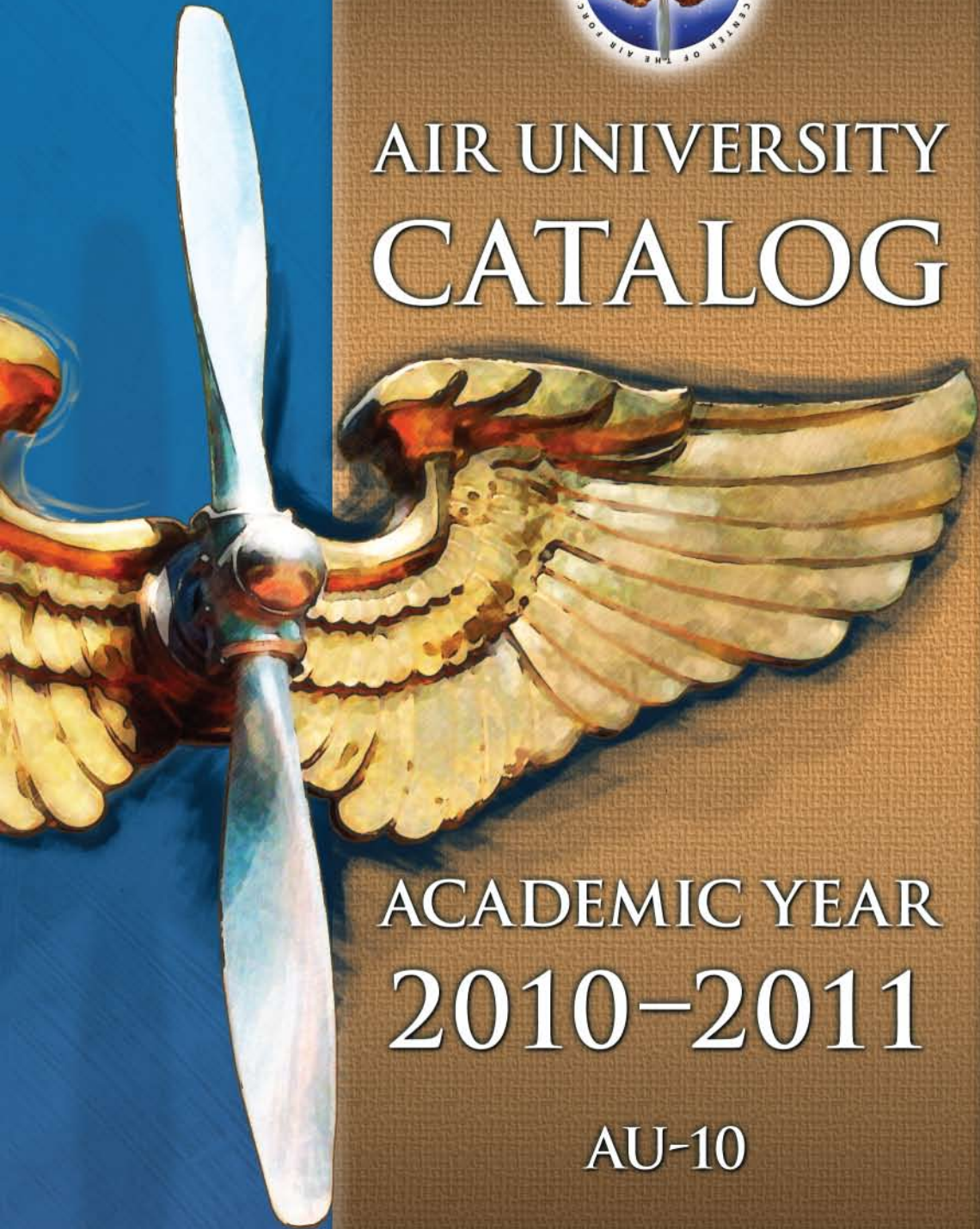




AIR UNIVERSITY CATALOG



ACADEMIC YEAR
2010–2011

AU-10

Air University Catalog

***Academic Year
2010-2011***



October 2010

The *Air University Catalog* is the official Air University publication for disseminating information on Air University educational programs, including professional military education. This catalog is supplemented by the following publications: *Air Force Institute of Technology (AFIT) Catalog*; *Community College of the Air Force (CCAF) General Catalog*; and *Air Force Institute for Advanced Distributed Learning (AFIADL) Catalog*.

The *Air University Catalog* serves as both a source document and a planning document for Air University schools and staff personnel. It serves as a public relations medium for Air Force, Department of Defense, and civilian audiences. The catalog also provides a brief description of the schools and professional organizations that make up Air University. Finally, it sets forth the educational opportunities available in each school, the work performed by each related organization in carrying out the educational objectives of Air University, and a brief description of all Air University educational support organizations.

The statements set forth in this catalog outline the current rules, regulations, and policies of Air University and are for informational purposes only. They should not be construed as the basis of a contract between the student and the university. While the provisions of this catalog normally will be applied as stated, the university reserves the right to change any provision listed in this catalog.

The *Air University Catalog* and other information about Air University organizations are available over the World Wide Web on the Air University home page (<http://www.maxwell.af.mil/au/index.asp>).

Air University, Maxwell Air Force Base, Alabama, provides the full spectrum of Air Force education, from precommissioning to the highest levels of professional military education, including degree granting and professional continuing education for officers, enlisted, and civilian personnel throughout their careers. Air University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

Disclaimer

This catalog is nondirective and should not be used for quoting Air University, Air Force, or Department of Defense policy. It is intended as a compilation of Air University academic information. Cleared for public release: distribution unlimited.

Contents

	<i>Page</i>
INTRODUCTION TO AIR UNIVERSITY	
Air University Key Staff	vii
Air University Advisory Bodies	ix
Air University Academic Units	xiii
General Information	xv
 AIR UNIVERSITY EDUCATION CENTERS	
Carl A. Spaatz Center for Officer Education	3
Curtis E. LeMay Center for Doctrine Development and Education	9
Jeanne M. Holm Center for Officer Accessions and Citizen Development	24
Thomas N. Barnes Center for Enlisted Education	26
Ira C. Eaker Center for Professional Development	28
 AIR UNIVERSITY GRADUATE PROGRAMS	
Air University Admission Requirements	33
Air War College	35
Air Command and Staff College	65
Air Command and Staff College Online Master's Program	75
School of Advanced Air and Space Studies	86
USAF Test Pilot School	94
Air Force Institute of Technology	103
 AIR UNIVERSITY UNDERGRADUATE PROGRAMS . . .	
Community College of the Air Force	107
Enlisted Professional Military Education Instructor Course	109
Airman Leadership School Resident Program	113
Airman Leadership School Distance Learning Program	117

	<i>Page</i>
Noncommissioned Officer Academy	
Resident Program	120
Noncommissioned Officer Academy	
Distance Learning Program	124
AF Senior Noncommissioned Officer	
Academy Resident Program	126
AF SNCO Academy Distance Learning Program . . .	130
Chief Master Sergeant Leadership Course	134
USAF First Sergeant Academy	136
 AIR UNIVERSITY NONDEGREE PROGRAMS	 141
Air War College Distance Learning Program.	143
Air Command and Staff College Nonresident	
IDE–Nonmaster’s Program	151
Squadron Officer College Faculty	
Development Course	159
Air and Space Basic Course	162
Squadron Officer School Resident Program	168
Squadron Officer School Distance Learning	
Program	173
Leadership Development Program	176
International Officer School	180
Officer Training School Academic	
Instructor Course	185
Officer Training School	188
Civilian Acculturation and Leadership Training . .	196
Air Force Junior Reserve Officer Training	
Corps Academic Instructor Course	198
Ira C. Eaker Center Academic Instructor	
Course	203
Commanders’ Professional Development	
School	204
Air Force Human Resource Management	
School	207
Defense Financial Management and	
Comptroller School	210
USAF Chaplain Corps College	213
National Security Space Institute	215

	<i>Page</i>
Joint Flag Officer War-fighting Course	218
Joint Force Air Component Commander Course	222
Combined Force Air Component Commander Course	226
Senior Joint Information Operations Applications Course	230
Contingency Wartime Planning Course	238
Joint Air Operations Planning Course	241
Information Operations Fundamentals Application Course	242
ACADEMIC SUPPORT	247
Air University Registrar	249
Directorate of Education Logistics and Communications	249
Air Force Research Institute	251
Air Force Enlisted Heritage Research Institute . . .	253
Air Force Historical Research Agency	254
Muir S. Fairchild Research Information Center . . .	256
AIR UNIVERSITY FACULTY	259
ACRONYMS AND ABBREVIATIONS	281

Introduction to Air University

AIR UNIVERSITY KEY STAFF

Lt Gen Allen G. Peck	Commander
Maj Gen David S. Fadok	Vice-Commander; Curtis E. LeMay Center for Doctrine Development and Education Commander
Dr. Bruce T. Murphy	Chief Academic Officer
Dr. John A. Shaud, Gen, USAF (Ret.)	Air Force Research Institute Director
Maj Gen Robert C. Kane	Carl A. Spaatz Center for Officer Education Commander
Maj Gen Teresa A. H. Djuric	Jeanne M. Holm Center for Officer Accessions and Citizen Development Commander
Brig Gen Walter D. Givhan	Air Force Institute of Technology Commander
Col Charles W. Johnson	Thomas N. Barnes Center for Enlisted Education Commander
Col James P. Galloway III	Ira C. Eaker Center for Professional Development Commander
Col Terry M. Luallen	Test Pilot School Commandant
Col Brian M. Killough	42d Air Base Wing Commander

AIR UNIVERSITY ADVISORY BODIES

Command Board of Advisors

The Air University (AU) Command Board of Advisors provides the commander of AU with feedback from the customer perspective of the major commands (MAJCOM). Board members inform the AU commander about the educational needs of their respective commands and their degree of satisfaction with AU's products and programs.

The board is advisory in nature and generally meets periodically at Maxwell AFB or the Department of Defense (DOD) at the Pentagon.

The membership is comprised of the vice-commanders of the MAJCOMs, as well as the Air National Guard deputy director. The Air Force deputy chief of staff, personnel, and the United States Air Force Academy vice-commander advise them.

Members

Vice-Commander, Air Education and Training Command, Chair
Vice-Commander, Air Combat Command
Vice-Commander, Air Force Space Command
Vice-Commander, Air Force Materiel Command
Vice-Commander, Air Mobility Command
Vice-Commander, United States Air Forces Europe
Vice-Commander, Pacific Air Forces
Vice-Commander, Air Force Special Operations Command
Vice-Commander, Air Force Reserve
Deputy Director, Air National Guard

Advisors

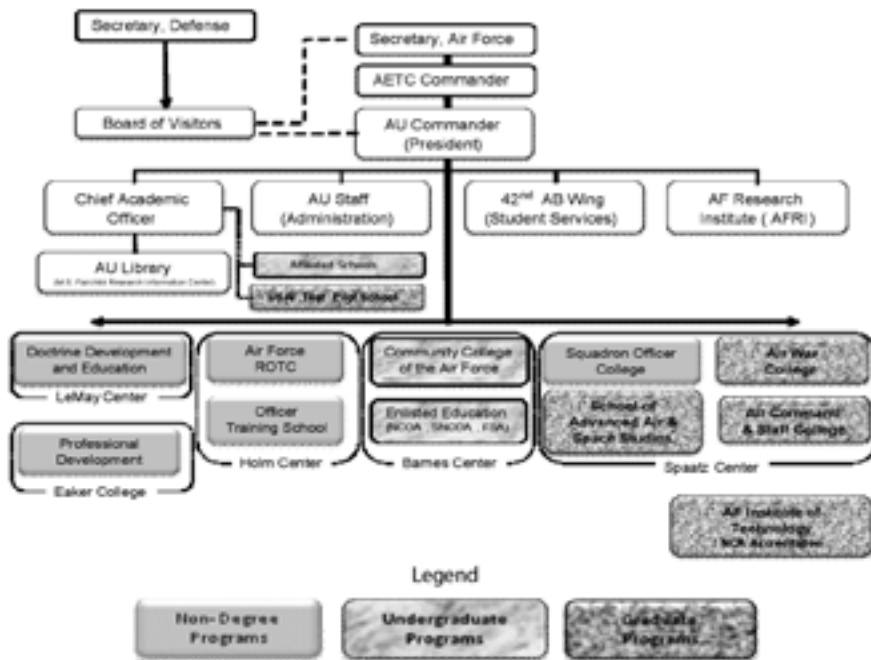
Air Force Deputy Chief of Staff, Personnel
Superintendent, United States Air Force Academy

Board of Visitors 2010

<p style="text-align: center;">Dr. Jack Hawkins, Chair Chancellor, Troy University, Troy, AL</p> <p style="text-align: center;">Mr. Norman Augustine, Chair-Elect Former Chairman and CEO Lockheed Martin Corporation, Bethesda, MD</p> <p style="text-align: center;">Dr. Tito Guerrero III, Past Chair President, Cambridge College, MA</p>	
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Gen Charles Boyd, USAF Retired Former President and CEO Business Executives for National Security Washington, DC	Maj Gen Kenneth Clark, ANG, Retired Former Adjutant General New Hampshire ANG, NH
ADM Vern Clark, USN, Retired Former Chief of Navy Operations Goodyear, AZ	Dr. Stephen P. Condon Maj Gen, USAF, Retired Aerospace Consultant
Amb. Gary J. Cooper Maj Gen, USMC, Retired, and Chairman, CNB Bankcorp Mobile, AL	Dr. Don Daniel Former Vice President, University of Tennessee Tullahoma, TN
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CMSgt Karl W. Meyers, USAF, Retired Realtor, Realty Executives, Simmonds Group San Antonio, TX	Dr. Ann Millner President, Weber State University Ogden, UT
CMSAF Gerald R. Murray, Retired Senior Manager, F22 Sustainment Lockheed Martin Corporation Marietta, GA	VADM Daniel T. Oliver, USN, Retired President, Naval Postgraduate School Monterey, CA
Maj Gen Richard Paul, USAF, Retired Former Vice President, Strategic Development & Analysis, Boeing Company Seattle, WA	Dr. Roger C. Poole, Brig Gen, USA, Retired Former Provost, The Citadel Charleston, SC
Dr. Ronald Segal, Maj Gen, USAF, Retired Woodward Professor of Systems Engineering and Vice President for Energy, Environment and Applied Research Colorado State University Fort Collins, CO	Dr. William Segura Chancellor, Texas State Technical College System Waco, TX
Dr. Eugene H. Spafford Professor of Computer Science Executive Director of CERIAS Purdue University Bloomington, IN	

AIR UNIVERSITY ACADEMIC UNITS



GENERAL INFORMATION

Internet Address

<http://www.au.af.mil/au/>

Air University (AU), headquartered at Maxwell AFB, is a major component of Air Education and Training Command (AETC) and is the Air Force's center for professional military education (PME).

Mission. *As the intellectual and leadership center of the Air Force, Air University provides dynamic comprehensive education to prepare graduates to develop, employ, command, research, and champion air, space, and cyberspace power at all levels.*

Vision. *The intellectual and leadership center of the Air Force. We produce the future.*

Air University provides the full spectrum of Air Force education, from precommissioning to the highest levels of professional military education, including degree-granting and professional continuing education for officers and enlisted and civilian personnel throughout their careers. The university's PME programs educate Airmen on the capabilities of air and space power and their role in national security. These programs focus on the knowledge and abilities needed to develop, employ, command, and support air and space power at the highest levels. Specialized professional continuing education (PCE) programs provide scientific, technological, managerial, and other professional expertise to meet the needs of the Air Force. Air University conducts research in air, space, and cyberspace power and education, leadership, and management. The university also provides citizenship programs and contributes to the development and testing of Air Force doctrine, concepts, and strategy.

History. The Wright brothers established the first US civilian flying school in Montgomery, Alabama, in 1910. In the 1920s, Montgomery became an important link in the growing system of aerial mail service. In the early 1930s, the Army Air Corps

Tactical School (ACTS) moved to Maxwell, and Montgomery became the country's intellectual center for airpower education.

Air University, established in 1946, continues the proud tradition of educating tomorrow's planners and leaders in air and space power for the Air Force, other branches of the US armed forces, federal government civilians, and many international organizations. Air University's current worldwide reach affects the careers of every Air Force member.

Organizational Structure. The university's primary operating locations are concentrated on three main installations. Most AU programs are located at Maxwell AFB in northwest Montgomery; some are located across town at the Maxwell-Gunter Annex; one is located at Wright-Patterson AFB, Ohio; and another at Edwards AFB, California. Although AU draws students from throughout the Department of Defense (DOD) and from the military forces of other nations, its mission is more easily described in terms of the two main groups it is primarily organized to serve: US Air Force commissioned officers and enlisted members.

Air University institutions include the Carl A. Spaatz Center for Officer Education (the Spaatz Center), Curtis E. LeMay Center for Doctrine Development and Education (the LeMay Center), Jeanne M. Holm Center for Officer Accessions and Citizen Development (the Holm Center), Thomas N. Barnes Center for Enlisted Education (the Barnes Center), Ira C. Eaker Center for Professional Development (the Eaker Center), Headquarters Civil Air Patrol, and several other support organizations. Support for the AU organizations on Maxwell-Gunter is provided by 42d Air Base Wing, the host organization. Another important part of AU is the Air Force Institute of Technology (AFIT), located at Wright-Patterson AFB and the United States Air Force Test Pilot School (USAFTPS) at Edwards AFB, California.

Accreditation and Degree-granting Authority

Air University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS) to award associate and master's degrees. Contact the commission at 1866 Southern Lane, Decatur, Georgia, 30033-4097, or call

404-679-4501 for questions about the accreditation of Air University. Both the Community College of the Air Force (CCAF) and the School of Advanced Air and Space Studies (SAASS) were separately accredited by SACS earlier—CCAF in 1980 and SAASS in 1998. Air University achieved regional accreditation in June 2004, effective at the beginning of the 2004 calendar year. At that time CCAF and SAASS became a part of Air University's regional accreditation.

Since AU is a federal entity, Congress must grant authority to award degrees. In October 1994 the AU commander received congressional authority to confer the master of airpower art and science degree upon graduates of the School of Advanced Airpower Studies (SAAS), now called the School of Advanced Air and Space Studies. In October 1999 the AU commander received congressional authority to confer the master of strategic studies upon graduates of the Air War College (AWC) and to confer the master of military operational art and science degree upon graduates of the Air Command and Staff College (ACSC). On 21 January 2008 Congress granted authority for Air University to award the master of science in flight test engineering to the graduates of the USAF Test Pilot School (USAFTPS). This approval included students enrolled in the program in April 2007 and those who graduated in USAFTPS classes 06B and 07A.

Policies

Privacy Act. Air University utilizes the guidelines of the Privacy Act of 1974 to protect the confidentiality and integrity of student records. AU also complies with the basic tenets of the Federal Family Educational Rights and Privacy Act (FERPA). However, the Department of Education, Family Policy Compliance Office, views AU as a DOD Section 6 school that is solely funded by the DOD under 10 *United States Code (USC)* Section 2164. As a federal military education institution, AU must adhere to established federal and services policies and guidelines on records. Since the accreditation of Air University by the Commission on Colleges of the SACS, student records are maintained in electronic media. The security and confidentiality of student records are central to the academic integrity of AU. Air

University is committed to protecting, to the maximum extent possible, the right of privacy of all individuals about whom it holds information, records, and files.

Academic Integrity. Air University abides by an uncompromising adherence to a code of ethics, morality, conduct, scholarship, and other values related to academic activity. (See Air University Instruction [AUI] 36-2309, *Academic Integrity*.)

Admission and Enrollment. AU schools and educational programs are offered to members of the US armed forces (primarily Air Force personnel), including the Reserves, National Guard, and selected civilian employees of the DOD and other government agencies. Air University programs and schools are not open to the general public except through special programs. An exception is the AFIT, where non-DOD US citizens may enroll in academic programs provided they meet the admissions standards. As part of the US military assistance programs, officers from other countries may attend several AU schools and courses. Selection for the AU schools and educational programs is made according to Air Force and other relevant government standards. (See AUI 36-2317, *Air University Degree Granting and Accreditation*.)

Grading Policy for Degree Programs. Students in degree-granting programs will receive course grades based on a four-point system with plus and minus grades. Pass (pass) and fail (no pass) grades may be awarded for designated courses according to school policy. Pass grades will count only toward hours attempted/earned and will not affect the grade point average (GPA). Fail (no pass) grades will count only as hours attempted but will not count as hours earned nor will they affect the GPA. (See AUI 36-2327, *Grading and Course Numbering for Air University Degree Programs*.)

Transfer Credit. Transfer credit is not accepted in AU's master's degree programs.

Assigning Credit. The degree-granting graduate schools (AWC, ACSC, the SAASS, and the USAF Test Pilot School) fol-

low sound practices for determining the amount and level of credit awarded for courses. Credit is normally awarded by assigning one semester hour to each 15 hours of classroom time. For such programs as the School of Advanced Air and Space Studies and the Air Command and Staff College distance learning degree, credit is awarded at the ratio of one semester hour for each 40 hours of preparation or classroom time.

Degree Program Withdrawal. Withdrawal/disenrollment is the permanent removal of any enrolled AU student from a course or school before its completion. Disenrollment may be, but does not have to be, accompanied by expulsion, which is the student's physical removal from AU schools, as well as disenrollment from academic credit programs. (See AUI 36-2315, *Student Disenrollment Procedures*.)

Academic Credit. The American Council on Education (ACE) recommends graduate-level credit for completion of some AU programs. Several colleges and universities accept graduate transfer credits from AU. Accepting/awarding transfer credits is at the discretion of each college or university. For more information, visit <http://www.militaryguides.acenet.edu>.

Educational Documents

Fraudulent Documents. Air University Registrar Student Services personnel ensure the authenticity of each document. Fraudulent documents are given to the AU registrar for appropriate action to include disenrollment and/or legal action. The student's AU transcript will be annotated with "student was disenrolled for submitting fraudulent documents."

Information Release. A student must authorize release of information pertaining to his or her educational record to a third party. Said student must submit a release letter (with an original signature) to the college's registrar. The student must state what information to release and to whom the information may be released. The Federal Family Educational Rights and Privacy Act of 1974, 5 USC 301, 10 USC 8013, and Executive Order 9397 dictate the policy regarding release of student data.

These directives specify that an educational record may not be released without the student's written consent specifying records to be released and to whom.

Transcript Request. Individuals must complete the AU Transcript Request form at <http://www.au.af.mil/au/registrar.asp>. Complete the form, sign it, and e-mail it to student.services@maxwell.af.mil (electronic signature accepted), or you may fax it to Defense Switching Network (DSN) 493-8127 or Comm 334-953-8127, or you can mail it to Air University Registrar, 60 Shumacher Ave., Maxwell AFB, AL 36112-6337.

The transcripts normally will be mailed to the addresses listed on the form within seven duty days of receipt. AU transcripts will not be faxed or e-mailed.

Students

Students should rely on the information listed below to monitor their rights. This information applies to all students.

Air University Policy Regarding Student Rights.

1. Air University schools/centers must inform their students in both residence and distance learning programs of the specific rights afforded them by virtue of their student status. Schools/centers must also ensure this AU policy is extended to all faculty, staff, and students in their respective instructional programs. Immediate dissemination of this policy is critical. Use of electronic methods of distribution, especially for currently enrolled distance learning students, is highly encouraged.
2. Nothing in this policy is intended to replace or supersede the procedures provided for actions under the *Uniform Code of Military Justice (UCMJ)* or disciplinary or administrative actions provided for in DOD directives or Air Force, Air Education and Training Command, or Air University instructions.
3. In addition to any rights conferred on students by individual AU schools/centers, this policy letter prescribes

that any AU student has a right to appeal any adverse action by following the appropriate courses of appeal described below:

- a. For academic issues involving non-AFIT students, the chain of appeal follows this order:
 - 1) Course instructor. If the appeal is not resolved at this level, the student informs the course director if an appeal is forthcoming . . .
 - 2) Course director. If the appeal is not resolved at this level, the student informs the course director that the process will be elevated to the . . .
 - 3) School commandant/commander. If the appeal is not resolved at this level, the student informs the commandant/commander of his/her intention to elevate the appeal to the . . .
 - 4) Center commander (if different from the school commandant/commander). If the appeal is not resolved at this level, the student informs the center commander of his/her intention to elevate the appeal to the . . .
 - 5) Air University chief academic officer. If the appeal is not resolved at this level, the student informs the chief academic officer of his/her intention to elevate the appeal to the . . .
 - 6) Air University commander. This is the highest level of appeal for academic issues. A decision made at this level is final.
- b. For nonacademic issues involving non-AFIT students, the chain of appeal follows this order.
 - 1) Course instructor. If the appeal is not resolved at this level, the student informs the course instructor of his/her intention to elevate the appeal to the . . .
 - 2) Course director. If the appeal is not resolved at this level, the student informs the course director of his/her intention to elevate the appeal to the . . .

- 3) School commandant/commander. If the appeal is not resolved at this level, the student informs the commandant/commander of his/her intention to elevate the appeal to the . . .
 - 4) Center commander (if different from the school commandant/commander). If the appeal is not resolved at this level, the student informs the center commander of his/her intention to elevate the appeal to the . . .
 - 5) Air University vice-commander. If the appeal is not resolved at this level, the student informs the vice-commander of his/her intention to elevate the appeal to the . . .
 - 6) Air University commander. This is the highest level of appeal for nonacademic issues. A decision made at this level is final.
- c. For academic or nonacademic issues involving AFIT students, the chain of appeal follows this order.
- 1) Course instructor. If the appeal is not resolved at this level, the student informs the course instructor of his/her intention to elevate the appeal to the . . .
 - 2) Course director. If the appeal is not resolved at this level, the student informs the course director of his/her intention to elevate the appeal to the . . .
 - 3) Appropriate AFIT school dean. If the appeal is not resolved at this level, the student informs the dean of his/her intention to elevate the appeal to the . . .
 - 4) AFIT vice-commandant. If the appeal is not resolved at this level, the student informs the vice-commandant of his/her intention to elevate the appeal to the . . .
 - 5) AFIT commandant. If the appeal is not resolved at this level, the student informs the commandant of his/her intention to elevate the appeal to the . . .

- 6) Air University commander. This is the highest level of appeal for academic and nonacademic issues. A decision made at this level is final.

Responsibilities. All students must abide by the *UCMJ*, Air Force instructions (AFI), and Air University instructions, as applicable. The *UCMJ* is available in the legal office on each Air Force installation, and other AFIs and AUIs are available via the Air Force Portal. Students must read and understand the provisions of this catalog. Additionally, students must follow the standards of behavior established by the school in which they are enrolled. All other categories of personnel are expected to follow the same guidelines.

AIR UNIVERSITY EDUCATION CENTERS

Air University encompasses five academic centers: the Carl A. Spaatz Center for Officer Education, the Curtis E. LeMay Center for Doctrine Development and Education, the Jeanne M. Holm Center for Officer Accessions and Citizen Development, the Thomas N. Barnes Center for Enlisted Education, and the Ira C. Eaker Center for Professional Development.

Carl A. Spaatz Center for Officer Education

Internet Address

<http://www.au.af.mil/au/spaatz/>

Mission. *The Spaatz Center for Officer Education directs, integrates, synchronizes, and supports professional military education in each college, thereby producing joint, coalition, inter-agency, and civilian leaders who efficiently and effectively articulate, advocate, and employ air, space, and cyberspace power in a joint and multinational environment to the commensurate level of their experience. The Spaatz Center for Officer Education also ensures that each school, squadron, and center has the required support and resources to advance its education, research, outreach, support, and engagement opportunities appropriate to its missions.*

Named after the first chief of staff of the United States Air Force, the Spaatz Center develops and instructs the entire USAF continuum of officer professional military education. It does this through its various organizations, which include the Air War College (AWC), Air Command and Staff College (ACSC), School of Advanced Air and Space Studies (SAASS), Squadron Officer College (SOC) (including Squadron Officer School and the Air and Space Basic Course), International Officer School, Spaatz Academic Research Centers, and the Education Support Squadron (including the Air Force Fellows Program).

The academic centers located within the Spaatz Center provide a focused capability that meets the requirements of Air University and an external sponsoring agency. Centers create professional military and continuing education curriculum and focused research on a subject of particular educational importance. The centers also enhance the prestige of AU through their research and outreach programs within the larger military and academic communities.

Currently, the following centers support this mission: the Air Force Culture and Language Center (to include the Air Force Negotiation Center of Excellence), Air Force Counterprolifera-

tion Center, Air Force Public Affairs Center of Excellence, and Air Force Center for Strategy and Technology.

The Air Force Culture and Language Center is an institution designed to enhance cross-cultural and language competencies within the Air Force. The center functions as a primary source of expertise for conceptual tools to communicate, collaborate, build relations, negotiate, and influence across cultural barriers. Within the Culture and Language Center, one additional center focuses on a niche within the domain. The Air Force Negotiation Center of Excellence spearheads the development and application of negotiation, collaboration, and problem-solving skills as a core competency throughout the Air Force.

The Air Force Counterproliferation Center undertakes education and research, both within and external to Air University, that includes such topics as appropriate military and diplomatic strategy when confronting weapons of mass destruction (WMD) opponents, international nonproliferation diplomacy, nonproliferation and arms control treaty regimes, counter-terrorist activities, and deterrence of conflicts. The center also organizes and conducts the annual Air Force Combating WMD Conference. The center also publishes books and occasional papers on related issues.

The Air Force Public Affairs Center of Excellence provides education and training on effective strategic communication and associated tactics, techniques, and procedures. The center is responsible for coordinating the instruction of strategic communication topics across professional military and continuing education courses and training programs. In addition, the center serves as the office of primary responsibility for strategic communication research and analysis. Staff members at the center serve as advisors in the development of strategic communication doctrine.

The Air Force Center for Strategy and Technology focuses on education, research, and publications that integrate technology into national strategy and policy. This center supports faculty and student research; publishes research through books, articles, and occasional papers; and engages in collaborative research with academic institutions around the world. The center is responsible for the development and execution of the annual AF chief of staff (CSAF)-directed Blue Horizons Study. This study

provides a 20- to 30-year strategic and technological estimate that feeds Air Force planning and programming efforts.

Air War College

Internet Address

<http://www.au.af.mil/au/awc/awchome.htm>

Mission. *To prepare students to lead in a joint environment at the strategic level across the range of military operations; to develop cross-domain mastery of joint air, space and cyberspace power and its strategic contributions to national security; and to advance innovative thought on National Security, Department of Defense, and Air Force issues.*

The War Department established the Air War College in 1946 at Maxwell Field, Alabama, and the college has operated continuously except for a six-month period during the Korean conflict. An interesting trivia item is that no graduates of the first class were members of the US Air Force; the Air Force wasn't created until after that first Air War College class graduated in 1947.

To accomplish the AWC mission, students must demonstrate mastery of dual challenges—academic enhancement and professional development. To meet these challenges, the college develops the knowledge, skills, and attitudes in its students that are significant to the profession of arms, with emphasis on air and space power and its application in joint and multinational war fighting.

Air Command and Staff College

Internet Address

<http://www.au.af.mil/au/acsc/>

Mission. *Prepare field-grade officers to develop, employ, and command air, space, and cyberspace power in joint, multi-national, and interagency operations.*

Air Command and Staff College, the Air Force's intermediate PME institution, prepares field-grade officers of all services (pri-

marily O-4s and O-4 selects), international officers, and US civilians for positions of higher responsibility within the military and other government arenas. Geared toward teaching the skills necessary to conduct air, space, and cyberspace operations in support of a joint campaign, ACSC focuses on shaping and molding tomorrow's leaders and commanders. The college's academic environment stimulates and encourages free expression of ideas and independent, analytical, and creative thinking.

ACSC traces its roots to the Air Corps Tactical School (ACTS), located at Maxwell Field from 1931 to 1942. After World War II, as the independent Air Force was formed, grew, and developed, the requirements and expectations of the school evolved to fulfill the service's educational needs. The vision of pre-World War II leaders has withstood the test of time. Although six decades have passed since the founding of ACTS, the present curriculum still focuses on expanding understanding of air, space, and cyberspace power and on increasing the number of midcareer officers. In 1962 the school became known by its current name, Air Command and Staff College.

ACSC is comprised of a command section, two academic directorates (Resident and Distance Learning), a support directorate (Mission Support), and the 21st Student Squadron.

Within the resident academic directorate, the curriculum is developed and delivered through three teaching departments—Department of Leadership and Strategy, Department of Warfighting, and the Department of International Security Studies. Within the distance learning academic directorate, the curriculum is developed and delivered through the Curriculum and Operations Departments. The two deans at ACSC—the dean of academic affairs (DE) and the dean of distance learning (DL) programs—provide academic leadership to the school's faculty and students. The DE, assisted by the associate dean for academic affairs and associate dean for operations, coordinates the integration of curriculum content and directs the planning and implementation of the academic program through the three teaching departments.

The dean of DL is responsible for planning, organizing, and delivering the college's distance learning program of instruction through two departments. The Curriculum Department develops courseware and provides instruction and guidance to students and online instructors, and the Operations Depart-

ment receives, converts, and delivers curriculum through a spectrum of multimedia delivery methods.

The 21st Student Squadron's leadership consists of a squadron commander and four operations officers. This staff is responsible for the health, morale, and welfare of some 500 resident students and their families.

Air Command and Staff College Online Master's Program

Internet Address

<http://www.au.af.mil/au/dlmasters.asp>

In March 2006 the secretary and chief of staff of the Air Force authorized Air University to design, build, and launch an on-line master's program (OLMP). The program provides Air Force officers an educational opportunity to meet service needs while also accommodating today's high-operations tempo. The program, launched in June 2007, is currently open to Air Force active duty, Guard, Reserve, and selected civil service employees. The OLMP is currently exceeding expectations across the board by creating quality educational opportunities for war fighters at home and abroad.

School of Advanced Air and Space Studies

Internet Address

<http://www.au.af.mil/au/saass/>

Mission. *Produce strategists through advanced education in the art and science of air, space, and cyberspace power to defend the United States and protect its interests.*

Air University's School of Advanced Air and Space Studies (SAASS) is the US Air Force graduate school for airpower and space power strategists. A highly qualified and motivated faculty, a small and carefully selected student body, a coherent and challenging curriculum, outstanding educational and research resources, and a well-designed facility combine to pro-

duce tomorrow's senior military leaders who are experts in the employment of air and space forces.

Squadron Officer College

Internet Address

<http://www.au.af.mil/au/soc/>

Mission. *Develop company grade officers (CGO) as leaders of integrity ready to fly, fight and win in air, space, and cyberspace.*

The Squadron Officer College (SOC) is chartered and resourced to educate CGOs in air, space, and cyberspace operations and the essentials of military leadership. Commissioned as an AU college in February 2000, SOC encompasses the Air and Space Basic Course (ASBC) and the Squadron Officer School (SOS) but also offers a leadership development program (LDP), a series of specially tailored online courses.

SOC provides support to these programs through its senior staff, the Academic Affairs Directorate, and the Directorate of Mission Support. The dean of academic affairs develops and maintains curriculum; manages the day-to-day classroom schedules, evaluation procedures, and course surveys; executes advanced technology, simulations, and DL programs; and is responsible for initial and advanced faculty development. The Directorate of Mission Support oversees student support and associated processes; ensures maintenance of facilities, including extensive field leadership facilities, equipment and the infrastructure supporting SOC's physical fitness and military leadership obstacle courses; and supervises the distribution of equipment and supplies across the college.

International Officer School

Internet Address

<http://www.au.af.mil/au/cpd/ios/ios.htm>

Mission. *Prepare international officers for resident PME; support international students attending AU courses; and execute Air University's International Affairs Program.*

The International Officer School (IOS) is the lead-up course to prepare all international officers for attending AWC, ACSC, and SOC. With the help of IOS, they are able to hit the ground running when integrated into the academic culture with the US officers in each school.

Curtis E. LeMay Center for Doctrine Development and Education

Internet Address

<http://www.au.af.mil/au/lemay/>

Mission. *As the principle Air Force organization responsible for doctrine expertise, the LeMay Center develops, advocates, assesses, and revises Air Force, joint, and multinational doctrine and ensures doctrinal concepts are integrated into Air Force tactics, techniques, procedures, education, and war gaming to enhance war fighting.*

Merging the Headquarters Air Force Doctrine Center (AFDC) and the College of Aerospace Doctrine, Research, and Education (CADRE) created the Curtis E. LeMay Doctrine Development and Education Center (the LeMay Center) on 2 August 2007. The center continues the traditions of the Air Corps Tactical School, where in the 1930s future leaders of the USAF were trained and the basic doctrine and concepts of US air-power for World War II were formulated. Whereas such ACTS instructors as Generals Harold L. George, Haywood S. Hansell, Jr., Claire L. Chennault, and George C. Kenney shaped doctrine and strategy in World War II, the center's staff is committed to providing the Air Staff and the MAJCOMs with original thought and applications of air and space power in the modern world. Placing the AFDC and CADRE into the LeMay Center unites doctrine development with education, concept development, and evaluation. It also gives the Air Force, AETC, and AU a central repository for the development of Air Force doctrine, concepts, and strategy.

The LeMay Center combines doctrine development, doctrine education, and war gaming into one integrated organization. The LeMay Center is responsible for the development and production of Air Force basic and operational doctrine, critical leadership input for joint and multinational doctrine development activities, doctrine education for the Air Force, and doctrine application within war games and simulations.

The center is administratively aligned under Air University and reports directly to the AU commander for doctrine PCE and for PME war gaming. It also serves as the executive agent to the CSAF for doctrine development. This unique mission organization and reporting hierarchy ensures that doctrine is produced with a clear connection into the USAF professional education system and the AF senior leadership. Not only is doctrine education in the classroom assured, but it can be effectively applied through war-gaming support also offered by the LeMay Center. The center provides

- air, space, and cyberspace doctrine for the Air Force;
- education for the Air Force in air and space doctrine and the doctrinal application of air and space power;
- study and analysis of the dynamics of warfare through modeling, simulation, and war gaming; and
- intelligence support to AU and its subordinate units.

The LeMay Center resident curriculum offers eight specialized courses: the Joint Flag Officer Warfighting Course (JFOWC), the Joint Force Air Component Commander (JFACC) Course, the Combined Force Air Component Commander (CFACC) Course, the Senior Information Warfare Applications Course (SIWAC), the Senior Executive Service (SES) Seminar, the Joint Air Operations Planning Course (JAOPC), the Contingency Wartime Planning Course (CWPC), and the Information Operations Fundamentals Applications Course (IOFAC).

These resident courses

- provide general and flag officer attendees the opportunity to participate in joint combat operation exercises;

- provide education and training to active duty captains through colonels of all services for air campaign planning in conjunction with assignment to joint, combined, and air component command staffs;
- provide USAF staff planners from staff sergeant through colonel an understanding of the DOD planning relationships from a joint deployment perspective;
- instruct future war planners in the art and science of contingency planning; and
- apply and value the principles of information warfare to enhance war-fighting capabilities.

The LeMay Center has four directorates: Warfighting Education Directorate, Doctrine Development Directorate, Warfighting Applications Directorate, and Intelligence Directorate.

Warfighting Education Directorate

Internet Address

<https://afkm.wpafb.af.mil/lemay-education>

The Warfighting Education Directorate conducts eight PCE courses to develop the judgment and skills required to employ air and space power effectively in combat. The courses significantly contribute to the war-fighting capabilities of all US military forces.

At the senior-leader level, the directorate conducts the JFOWC, JFACC Course, CFACC Course, and Senior Joint Information Operations Applications Course (SJIOCAC). These premier, executive-level courses prepare officers at the one- and two-star rank from all four services for combat leadership responsibilities in the joint and combined arenas. The directorate also conducts the Air Force Senior Executive Warfighter Perspective Seminar to expose key senior civilian leaders to air and space power concepts and USAF and joint doctrinal issues affecting the conduct of warfare in the twenty-first century.

Doctrine Development Directorate

Internet Address

<https://wwwmil.maxwell.af.mil/au/lemay/>

The Doctrine Development Directorate researches, develops, produces, and disseminates basic and operational-level doctrine for the CSAF. Its mission is to lead the Air Force in basic and operational-level service, joint, and multinational doctrine development; to advocate Air Force doctrinal equities in joint and multinational publications and fora; and to provide doctrinal advice and solutions to shape Air Force senior leader decisions.

The directorate is comprised of Airmen from various backgrounds and training, bringing a breadth of experience to doctrine development. One third of the directorate is composed of civilian employees, providing depth of doctrinal knowledge. Directorate personnel are chartered by the CSAF to be his doctrinal voice and are directly responsible to the CSAF on all matters of basic and operational-level doctrine. This directorate supports the commander of the LeMay Center in his capacity as the CSAF's executive agent for doctrine. To accomplish these duties, the directorate established two divisions: Service Doctrine Development (DDS) and Joint Doctrine Development.

Service Doctrine Development Division. This division researches, develops, produces, and disseminates Air Force doctrine documents for the service. Service doctrine provides the foundation for what the Air Force takes to the joint doctrine development arena, providing the Air Force's best practices to drive joint doctrine. DDS is responsible for producing the service's capstone doctrine publications, Air Force Doctrine Document (AFDD) 1, *Air Force Basic Doctrine*, and AFDD 2, *Operations and Organization*. It also develops and produces doctrine in air warfare; space operations; irregular warfare; agile combat support; information operations; air mobility; special operations; command and control; intelligence, surveillance, and reconnaissance (ISR); homeland operations; cyberspace operations; and nuclear operations.

Joint Doctrine Development Division. This division is the Air Force voice in the development of joint doctrine publications for the chairman of the Joint Chiefs of Staff (CJCS) and in the

development of multinational doctrine publications for the North Atlantic Treaty Organization (NATO). The director for doctrine development is the Air Force chair at the Joint Doctrine Planning Conference. The division chief is the US head of delegation to the NATO Air Operations Working Group, NATO Air Operations Support Working Group, NATO Joint Identification Panel, NATO Joint Unmanned Aerial Vehicles Panel, and Air and Space Interoperability Council. Personnel research and present the consolidated Air Force position for the production of all joint publications and for the specific production of five joint publications for which the Air Force is the lead agent.

Additional Doctrine Development Directorate Activities.

In addition to producing service and joint doctrine as executive agent to the CSAF for doctrine, this directorate provides the subject matter experts to present briefings to general officers and SES civilians at courses presented by the LeMay Center/Warfighting Education (WE), along with pre-CAPSTONE courses, sister-service war colleges, and other far-reaching courses both within and outside the Air Force. It teaches doctrine development to foreign partners from around the globe and assists sister-service doctrine developers with their efforts. The course also provides doctrinal advice to commanders throughout the service, from numbered Air Force commanders to commanders of Air Force forces in joint task forces (JTF).

Warfighting Applications Directorate

Internet Address

<https://wwwmil.maxwell.af.mil/au/lemay/index.asp>

In 1975 the Clements Blue-Ribbon Panel on Excellence in Professional Military Education cited a need for service schools to emphasize war fighting and decision making in combat. In 1976 the Air Force chief of staff's Constant Readiness Tasking directed AU to "put more war in the War College." The concept for the Air Force Wargaming Institute (AFWI) evolved from these two initiatives. The facility opened in 1986 at Maxwell AFB, Alabama. When the Air Force Doctrine Center and CADRE merged to become the LeMay Center for Doctrine Development and Education, AFWI's Wargaming Directorate was renamed

Warfighting Applications (WA) to reflect the new mission to develop, educate, and apply Air Force doctrine. WA supports a broad range of war games, electives, and events to meet the needs of the Air Force, DOD, and international sponsors.

Facility and Organization. WA is housed in a special-purpose, 56,000-square-foot facility. It can operate in whole or in part as a secure, classified working area. The building has moveable walls, can be configured to make 28 game rooms, and has two conference rooms—all equipped with audio and video capabilities. WA has two divisions: Operations and Technology.

The Wargaming Operations Division is responsible for the war-gaming life-cycle process, to include definition, testing/preplay, preparation, execution, and post-war-game analysis.

The Wargaming Technology Division plans, develops, integrates, and maintains web-based, client-server, and stand-alone software on several hardware and software platforms in support of wargaming events and other organizational needs. This division houses the specialists who acquire, operate, develop, and maintain the WA suite of models. Together, the suite of war-gaming models is called the Air Force Educational Wargaming Toolkit (AFEWT).

The AFEWT includes the following tools:

1. Simulated Warfare (SIM WAR) XXI is a joint, theater-level campaign, combat-simulation model. This tool allows students to simulate the air operations center (AOC) planning process by planning the next day's air tasking order (ATO) while simultaneously flying out the current ATO.
2. Rapid Scenario Generator is a scenario building tool capable of rapidly building real-terrain and infrastructure-based scenarios for use in the SIM WAR XXI model.
3. Accelerated Combat Timeline (ACT) is an operational-level graphical user interface to the SIM WAR XXI model.
4. WebForces is an automated map display tool that allows viewers to see and move forces. This tool can interface with ACT and SIM WAR XXI and stand alone for manual war games.

5. Air Web Planner (AWP) is a web-based planning tool that allows the players to input the air campaign plans.
6. War-game Interactive Support System Online is a multi-purpose tool that facilitates collaboration, accesses reference libraries, accommodates requests for information, allows adjudication, posts documents, and channels communication and electronic surveys.
7. Web Reports is a web-based reporting tool that provides results to the players on the previous day's adjudication as computed by SIM WAR XXI.
8. Bottom Line simulates the impact of national budget decisions on the state of the nation.

War Games and Simulation Exercises. In a typical year, AFWI plans, develops, and conducts approximately 21 war games (including three international war games conducted via foreign military sales) and exercises for over 5,625 participants. AFWI uses computers, simulation models, and seminars to address how military forces deploy, fight, and sustain combat. The institute provides a "laboratory environment" in which current and future commanders and their staffs are given the opportunity to study warfare realistically to identify problems in peacetime before they face them in combat.

Blue Thunder III. The Blue Thunder III (BTIII) war game is not currently used, but it is available upon request. BTIII reinforces air and space doctrine and provides students with a practical application of air and space power. The war game emphasizes the complexities of air and space warfare through simulated AOC operations. BTIII is a flight-versus-flight simulation of a three-day symmetrical air war. Each side has the opportunity to execute the roles of a coalition-led combined air operations center (CAOC). Students explore the tenets of air and space power and practice the Air Force distinctive capabilities as they are guided through the ATO production cycle. SIM WAR XXI is the software used to adjudicate the student plans. BTIII focuses on replicating employment of air and space power and forces at the operational and tactical levels of war. BTIII provides students an understanding of the basic core operations conducted in an AOC as described in Joint Publication (JP) 3-30, *Command and Con-*

trol for Joint Air Operations, and AFI 13-1, AOC Operational Procedures—Air and Space Operations Center.

Granite Sentry. Operation Granite Sentry is Squadron Officer School's Command and Leadership exercise using AFWI-developed interface and software tools similar to those used in an operational AOC. The war game reinforces the enduring leadership competencies as presented in AFDD 1-1 and as taught throughout SOS. Specifically, the war game reinforces the concepts of group problem solving, organization, communication, team building, situational leadership, and followership. It has an ancillary benefit for the students to be exposed to the planning and employment of air and space operations. The war game is divided into three identifiable phases. Phase 1 is the Prep Phase. It occurs during weeks one through three of the curriculum. The students are expected to review materials, organize their flights, and delegate responsibilities in preparation for executions. Phase 2, the first execution period, challenges the students' leadership and decision-making capabilities in an AOC combat operations floor environment that includes an ATO fly-out. Phase 3 transitions the students to wing-level leadership positions. With a scenario similar to a wing operational readiness inspection, students assume leadership roles commensurate with an installation control center and emergency operations center. The simulation is computer assisted using the War-game Interactive Support System Online and WebForces. Phases 2 and 3 are completed in one academic day, with each phase lasting approximately four hours. It is manually adjudicated and controlled by the individual SOS flight commander. Each SOS flight of 12–14 students makes up an independent game and receives an individual score based on decisions made during the simulation.

Joint Planning Exercise. The Joint Planning Exercise (JPEX) is the culminating event of the ACSC Joint Campaign Planning Course. The primary focus of JPEX is to demonstrate how joint campaign planning requires the integration of leadership, critical thinking, and doctrine through the application of operational art and design to attain unified action across the range of military operations. This gives the students the functional abilities to serve as planners on a joint staff. During JPEX students, as members of a joint planning cell, will de-

velop and present mission analysis and commander's estimate and concept of operations briefings to their seminar directors. The concept of operations will serve as the combatant commander's direction to the air component commander to execute in the Joint Air and Space Exercise (JAEX).

Joint Air and Space Exercise. JAEX is the culminating event of the ACSC Joint Air and Space Operations Course. JAEX is designed to equip students to understand and appreciate the complex and time-critical operational control processes that occur within the combined/joint air operations center (C/JAOC) and between the air component and other functional components during execution of air and space operations. For JAEX, students will role-play as members of a combined/joint force air component commander (C/JFACC) staff. Students will focus on the joint air estimate process evaluating national and theater objectives and military courses of action to develop a joint air operations plan (JAOP). Students will also focus on C/JFACC guidance, apportionment, targeting, and development of master air attack plans.

Capstone War Game. Capstone War Game (CWG) is the culminating event for ACSC's Department of Joint Warfare Studies' course structure. The primary purpose of the CWG is to integrate the materials throughout the entire joint war-fighting curriculum. This exercise will serve as a culminating event where students will apply their knowledge of the joint force, joint planning, and joint air and space operations. The exercise is designed to emulate the fluid environment that exists within a JAOC and will require the students to demonstrate their critical thinking skills as they address a rapidly evolving problem focused on joint air operations supporting the joint force commander's requirements. To facilitate student adaptability to a rapidly evolving situation, an adjudication process will be employed to facilitate performance assessment to provide student feedback. CWG will continue where JAEX left off. Students will be divided according to division and fill out all the major divisions of the C/JAOC and relevant coalition components. They will then work within the joint air tasking cycle to produce desired effects based on the operational goals established in the joint operation planning process and the JAOP. A corps of adjudicators will augment instructors to produce results of stu-

dents' inputs. Students will then make adjustments for the next day's ATO input.

Intermediate-Level Education Exercise. The Intermediate-Level Joint Exercise (ILE EX) is an elective at ACSC that focuses on collaborative planning at the JTF and component command levels, providing students from the colleges involved an opportunity to plan and role-play in selected representative staff groups. The exercise is designed to equip students to understand and appreciate the complex and time-critical operational processes that occur within the JTF and C/JAOC and between the air component and other functional components during planning of air and space operations. ILE EX demonstrates what air and space power, forces, and concepts bring to the fight at the operational level of war. It emphasizes the complexities of warfare through simulated JTF and C/JFACC activities. Student officers apply the basic concepts of campaign planning. This challenging environment requires officers to continually assess the effectiveness of their joint air operations plans and to modify them, if required. Students from ACSC, Command and General Staff College (US Army), College of Naval Warfare (CNW), and Training and Education Command (US Army) are invited to participate in this joint exercise annually as part of their joint intermediate-level PME program. The exercise takes place during the spring semester. A communications exercise/test is conducted before the start of the exercise with the goals of allowing the JTF and component staffs to get organized, increasing all participants' understanding of the scenario, and ensuring all collaborative tools and communication equipment are functional. Exercise execution spans 4.5 days, with an additional half-day for after action reviews. A joint after action review takes place via video teleconference. JTF-level daily execution occurs throughout the exercise.

Theater Campaign Warfare. Theater Campaign Warfare is the capstone war game for the SAASS. Students from the School of Advanced Military Studies (SAMS) at Fort Leavenworth, Kansas; the Naval Operational Planning Course at Newport, Rhode Island; and the School of Advanced Warfighting (SAW) at Quantico, Virginia, all augment the war game. This war game helps to develop greater cross-service appreciation of theater operational issues. The game is a seminar-based edu-

cational war game that is designed to provide students an opportunity for synthesis through the application of concepts about the nature and employment of military forces they have developed during the academic year. Students evaluate the efficacy of their classroom concepts using the war game as one of the data points in their continuing education and develop a greater cross-service appreciation of theater, strategic, and operational issues. The game consists of two separate worlds, each with three independent seminars, and includes four days of planning, execution, and analysis. Game moves facilitate educational objectives by covering periods varying from a few days to several weeks.

Solo Challenge. Solo Challenge (SC) is the capstone war game of the AWC academic year and includes the themes of leadership, doctrine, strategy, political/military affairs, joint/combined warfare, air and space power, and technology. It provides AWC students with the opportunity to demonstrate their ability to translate national-level decisions into strategic and operational-level action. This war game forces participants to manage ongoing global crises and a homeland security scenario while they are confronted with projected limits on force structure and overseas basing. This war game is conducted at the unclassified level. SC consists of a one-day student spin-up, three days of crisis action planning, one day of execution, and one day of evaluation/wrap-up. The war game is divided into three separate and independent worlds. Each world contains nine student cells: National Security Council, Policy Committee, Joint Staff, Africa Command (AFRICOM), Special Operations Command (SOCOM), US Central Command (CENTCOM), Pacific Command (PACOM), US Northern Command, and operating forces.

Joint Land, Aerospace, and Sea Simulation. Joint Land, Aerospace, and Sea Simulation (JLASS) is a computer-assisted, theater-level seminar war game. It is the only joint-sponsored war game conducted by the professional military education senior-level colleges. Its overall goal is to enhance joint PME through an examination of potential US military responses to regional crises. The primary focus is on joint and combined warfare conducted at the operational and strategic levels. JLASS is a multilateral, dynamic, computer-assisted, seminar-

based strategic and operational war game conducted at the field army, task force, and tactical air force levels and above. Service school participants divide into Red and Blue Teams that assume the role of combined command and subordinate staffs. The Air War College, US Army War College, US Marine Corps War College, College of Naval Warfare, Naval War College, and Industrial College of the Armed Forces students make up the Blue Team, while AWC acts as the Southwest Asia area of responsibility (AOR) Red Team staff. Red Teams for PACOM and AFRICOM AORs come from sister-service college faculty members and the LeMay Center contract intelligence support personnel. Participants start with a crisis scenario that involves regional conflicts 10 years into the future. Their mission is to promote the policies and objectives of their assigned teams. The distributive phase of the game takes place at the player and faculty home stations in December. The teams make inputs via a collaborative Web site. World situation and specific scenario briefings establish the crisis at hand. The teams also identify national interests and objectives of all concerned nations and establish allied relationships. The teams then create a combined command and subordinate component command staff and develop a theater campaign plan. They establish their campaign strategy, evaluate enemy intent and capability, posture forces, and determine logistical requirements to sustain combat operations. With the completion of the campaign planning phase, participants assemble at AFWI in April and begin the war game. Force-on-force employment of player assets occurs through written move orders. Adjudication is then performed through a combined manual/computer analysis of alliance inputs. The war game continues for up to four additional moves, with game time intervals varying from days to several weeks or months. Ongoing intelligence and situation updates apprise participants of campaign performance.

Pegasus-Australia. Pegasus-Australia is an unclassified computer-adjudicated, theater-level war game developed by the AFWI and used by the Australian Command and Staff College. The simulation models the first days of war between two opposing alliances. Australian Command and Staff College divides participants into Blue and Red Teams that assume the role of the combined command staffs of the two opposing alli-

ances. Nearly 60 participants are divided into Blue and Red syndicates and are pitted against each other. The game covers one day of prewar maneuvering followed by four days of computer-adjudicated warfare. The game begins with the development of theater campaign plans by opposing syndicates. Assuming roles as commanders and their staffs, participants develop strategy, evaluate enemy intent and capability, posture forces, and determine logistical requirements to sustain combat operations. Computer-generated map displays and web-based status reports provide intelligence support. Once the campaign plan is complete, participants move to the execution phase of the war game, making air, land, and sea order inputs on personal computers using AWP and WebForces software. Participants assign aircraft packages to accomplish offensive, defensive, interdiction, reconnaissance, airspace control, and support missions. They accomplish land moves by entering land unit orders for maneuver, reinforcement, and fire. Students also have the opportunity to task certain space-based reconnaissance assets. After players finish their moves at the end of the day, the SIM WAR XXI model adjudicates the inputs. Updated electronic map displays and web-based status reports provide battle damage assessment and current intelligence. Armed with the previous move's results, syndicates continue the game cycle by returning to the planning phase where they either continue or modify their campaign plan and enter a new set of inputs, as they deem appropriate. After the last day of battle, syndicates debrief their campaign plans and provide insights into their successes and failures. Pegasus-Australia is typically conducted in the May-June time frame.

Pegasus-UK. Pegasus-UK (United Kingdom) is a computer-adjudicated, theater-level war game of the SIM WAR XXI series developed by the AFWI for Britain's Joint Services Command and Staff College (JSCSC). The exercise models the first days of a notional war between two fictional alliances. The JSCSC directing staff divides the participants into Blue and Red syndicates (teams) that assume the role of the Combined Forces Command (CFC) staffs of the two opposing alliances. Close to 100 participants divide into five Blue and five Red syndicates pitted against each other in seven simultaneous and independent games. The game covers one day of prewar maneuvering

followed by four days of computer-adjudicated warfare. The remainder of the week is similar to the Pegasus-Australia game; however, throughout the week actual British media representatives conduct live radio and television interviews with key participants to enhance the war game. Pegasus-UK is typically conducted in the fall.

Pegasus-Netherlands. Pegasus-Netherlands is a computer-adjudicated, theater-level war game of the SIM WAR XXI series developed by the AFWI for the Netherlands Defense College Joint Advanced Staff Course. This is a two-week event that includes a review of joint air operations followed by a computer-based simulation. The exercise models the first days of a notional war between two fictional opposing alliances. The Netherlands Defense College directing staff divides the participants into Blue and Red syndicates (teams) that assume the role of the CFC staffs of the two opposing alliances. Nearly 16 participants divide into Blue and Red syndicates pitted against each other. The game covers one day of prewar maneuvering followed by two days of computer-adjudicated warfare. The students and staff participate in this war game at AFWI in the summer.

Futures Capabilities Game. Futures Capabilities Game (Futures) is one of the CSAF's two Title X war games. Futures is a long-range strategic planning activity designed to compare alternative futures and force structures to support strategic planning inputs. The game influences (and is influenced by) the Air Force's other Title X war game, the Unified Engagement series. The insights gleaned from the game impact Air Force strategic planning, concept development, and force structure investment streams. As a long-range planning activity, Futures focuses on evaluating strengths and weaknesses of future concepts based on the Air Force vision and strategic plans and testing alternative force structures to help shape future investment strategies. AF/A8XC, in coordination with AF/A5XS, is responsible for game design and execution, and it is hosted at the AFWI.

Exercise in National Budget Priorities. The Comptroller School executes Exercise in National Budget Priorities (XNBP) several times each year. This is an unclassified, stand-alone, computerized executive planning exercise that addresses national budget priorities as impacted by presidential and cabinet-level decisions. This strategic-level exercise utilizes the Bottom-

Line computer model, which analyzes presidential, economic, political, and military budget decisions and their impact on the state of the nation. Each game year provides a state of the nation report, which is a compilation of social and economic indices including voter support, unemployment, gross national product, war risk, and inflation. XNBP stimulates participants to actively test their understanding of budgetary and economic relationships in a realistic and enjoyable environment. It reinforces the relationships between foreign and domestic policy decisions and details how allocation of scarce resources to support those decisions affects the state of the nation. The Bottom-Line model resides on one compact disk and can be executed on any portable computer. XNBP is conducted as an independent three-hour game with each seminar acting as a team. The game represents a four-year presidential term, with participants making four moves in the form of constructing four annual budgets.

Intelligence Directorate

Internet Address

<https://wwwmil.maxwell.af.mil/au/lemay/index.asp>

The Directorate of Intelligence (IN) delivers intelligence, surveillance, and reconnaissance education throughout the AU continuum. Its goal is to educate AU resident and distant learning students and develop faculty on the core tenets of ISR operations in the air, space, and cyberspace domains, thereby preparing them to create innovative solutions to operational and strategic issues. IN personnel focus on ISR doctrine, policy, programs, strategy, employment, and vision for current and future ISR operations and issues essential to leaders' understanding of the operational environment. IN develops ISR curriculum guidance for AU schools, centers, and educational organizations. This directorate is the Air University ISR curriculum chair responsible for overseeing intelligence and ISR language in key guidance documents and ensuring the appropriate issues are taught at all levels of AU. IN coordinates the research and publication of materials on key ISR issues facing the Air Force, joint war fighter, and nation. As the AU senior intelligence officer, the

IN supports the AU commander and AU colleges and centers by providing ISR expertise and guidance and by coordinating guest speakers throughout the year. The senior intelligence officer maintains regular liaison with the Air Force A2 and other senior members of the national intelligence community. The IN coordinates ISR issues with senior leaders and students assigned to AU. IN conducts the following educational activities:

- teaches ISR electives at AWC and ACSC, emphasizing the full integration of ISR operations into military operations;
- instructs ISR research seminars at ACSC by allowing students to investigate ISR issues in depth;
- provides lectures on ISR doctrine and operations at the Spaatz Center, the Holm Center, and the LeMay Center's war-fighting education courses;
- provides lectures on ISR doctrine and operations within AU distance learning curricula; and
- leads the AU intelligence mentoring and cross-talk program consisting of over 100 ISR professionals assigned to AU.

The LeMay Center/Intelligence Security is the AU Special Security Office (SSO). The SSO controls, safeguards, and ensures proper use of sensitive compartmented information (SCI), manages over 1,300 SCI billets, and provides physical security for four temporary secure working areas and three accredited SCI facilities. The SSO also operates AU's SCI communications center, maintaining the Joint Worldwide Intelligence Communications System for users at Maxwell-Gunter AFB, Alabama.

Jeanne M. Holm Center for Officer Accessions and Citizen Development

Internet Address

<http://www.au.af.mil/au/holmcenter/>

Mission. *Develop the best Air Force leaders and citizens of character who are dedicated to serving the nation.*

In 1995 the Air University Board of Visitors recommended that AU bring together officer accession sources to streamline the organizational structure and reduce the commander's span of control. Air Force Officer Accession and Training Schools (AFOATS) were activated on 14 February 1997, merging Officer Training School (OTS) and the Air Force Reserve Officer Training Corps (AFROTC).

The Jeanne M. Holm Center for Officer Accessions and Citizen Development (the Holm Center) was formally established at Maxwell AFB in June 2008. The Holm Center is named for the first female Air Force officer to achieve general officer rank. Four distinct organizations make up the Holm Center: AFROTC, OTS, Civil Air Patrol-USAF (CAP), and the Air Force Junior Reserve Officer Training Corps (AFJROTC). AFROTC, located at 144 host universities and at more than 900 associated colleges and universities, is designed to educate, train, and commission officers for the US Air Force. The AFROTC program is a four-year university-level program that presently commissions approximately 2,000 new Air Force officers each year. OTS, located at Maxwell AFB, is the Air Force's flexible officer-commissioning program and is capable of increasing its enrollment rapidly to meet changing Air Force officer-accession requirements. Currently, OTS Basic Officer Training (BOT) produces approximately 600 new Air Force officers per year (500 active duty and 100 Air Force Reserve), the Academy of Military Science (AMS) produces about 500 new Air National Guard (ANG) officers per year, and OTS Commissioned Officer Training (COT) trains about 1,300 newly commissioned medical professional, chaplain, and judge advocate general officers for active duty, Air Force Reserve (AFRES), and Air National Guard (ANG) assignments. AFROTC and OTS taken together produce over 75 percent of the current Air Force requirement for newly commissioned line officers and train nearly 100 percent of newly commissioned nonline officers. The Holm Center also directs the Air Force's high school citizenship training program, the AFJROTC. The AFJROTC program, located at 884 high schools worldwide, is a citizenship-development program with a current enrollment of about 105,000 cadets. In addition, the Holm Center recently added Headquarters CAP-USAF, which acts as a liaison providing assistance and oversight for the CAP in its

role as the Air Force's official auxiliary. The CAP's 59,000 senior and cadet members operate a fleet of 550 aircraft, perform emergency services, and provide cadet program activities and aerospace education support for federal, state, and local customers. As of fiscal year 2010, the civilian training program Civilian Acculturation and Leadership Training (CALT) became a course of the Holm Center. More than 300 CALT graduates will complete the course each year.

The Holm Center furnishes coordinated leadership and policy direction for the Air Force's officer recruiting, training, and commissioning programs at OTS and at AFROTC detachments at host universities. The Holm Center's staff manages, supports, and develops curriculum and support activities to train tomorrow's Air Force officers. The merger of AFROTC and OTS provides

- a single focal point for AETC's officer accessions,
- centralized support and curriculum development,
- one organization to commission and train over 75 percent of Air Force line officers, 100 percent of new Air Force Reserve and Air National Guard lieutenants, and nearly 100 percent of nonline (medical professionals and chaplains) and legal officers, and
- a method to smooth production flow between AFROTC and OTS.

Thomas N. Barnes Center for Enlisted Education

Internet Address
<http://cepme.au.af.mil>

Mission. *Provide the continuum of education necessary to inspire and develop enlisted leaders with the moral framework of integrity, service, and excellence.*

The Thomas N. Barnes Center for Enlisted Education (formerly College for Enlisted Professional Military Education) was

activated in July 2008. The Barnes Center provides degree and professional development education opportunities to more than 300,000 enlisted Airmen each year. The Barnes Center provides oversight and direction for eight enlisted academic program areas. Educational programs organized under the Barnes Center for Enlisted Education are affiliated through the Community College of the Air Force (CCAF), which is accredited through Air University by the Commission on Colleges of SACS to award the associate degree.

The CCAF provides associate in applied science degrees and other academic credentials that enhance mission readiness, contribute to recruiting, assist in retention, support the career transition of Air Force enlisted members, and facilitate enlisted members in completing their bachelor degrees.

Enlisted professional military education (EPME) programs are managed through the center's dean of academic affairs. Academic Affairs (formerly the Educational Programs Cadre) is responsible for the development and standardization of four resident EPME programs and three distance learning programs encompassing all levels in the continuum of enlisted leadership development. Academic affairs is also responsible for faculty and staff development for personnel assigned to EPME programs AF-wide. More than 55,000 enlisted Airmen complete EPME programs each year.

The Airman Leadership School (ALS) is the first level of the EPME continuum and prepares senior Airmen to be professional, war-fighting Airmen who can supervise and lead Air Force work teams to support the employment of air, space, and cyberspace power. Currently, there are 67 ALS programs worldwide. ALS is also available via DL.

The Noncommissioned Officer Academy (NCOA) is the second level of enlisted PME and prepares technical sergeants to be professional, war-fighting Airmen who can manage and lead Air Force units in the employment of air, space, and cyberspace power. Currently, there are 11 NCOAs worldwide with a DL option.

The Air Force Senior Noncommissioned Officer Academy (SNCOA) is the third level of enlisted PME. SNCOA prepares senior noncommissioned officers to lead the enlisted force in the employment of air, space, and cyberspace power in support

of US national security objectives. There is a single resident SNCOA located at the Maxwell-Gunter Annex with a DL option.

The Chief Master Sergeant Leadership Course (CLC) is the culminating level of enlisted PME. It provides chief master sergeants a strategic perspective in their role as senior enlisted leaders. The CLC is an in-residence only program.

In addition to the above EPME programs, the Barnes Center also provides oversight to the Air Force First Sergeant Academy (FSA). The FSA—a professional continuing education program—educates, trains, and prepares select senior noncommissioned officers to serve as advisors to commanders on issues that impact Airmen in successfully accomplishing the Air Force mission.

The Barnes Center is also home to the Air Force Enlisted Heritage Research Institute (EHRI). EHRI is dedicated to preserving the rich and dramatic heritage and tradition of the enlisted corps of the US Air Force and includes the US Army Aeronautical Division, Army Air Service, Army Air Corps, and Army Air Forces in the development of airpower to defend the United States.

Ira C. Eaker Center for Professional Development

Internet Address

<http://www.au.af.mil/au/ecpd>

Mission. *Provide the highest quality multidisciplined professional continuing education and technical training to Air Force, DOD, and international students.*

The Air University Center for Professional Development was activated on 1 August 1986. In October 1993 the center was redesignated the Ira C. Eaker Center for Professional Development to honor General Eaker's significant contributions to the advancement of aviation, the Air Force, and the continuing professional development of its members.

The Eaker Center umbrella spans five schools: Commanders' Professional Development School, Air Force Human Resource Management School, Defense Financial Management and Comptroller School, the USAF Chaplain Corps College, and the National Security Space Institute.

AIR UNIVERSITY GRADUATE PROGRAMS

This section includes the Air University requirements for admission to its degree programs. The graduate degree programs offered by Air University include

- Air War College (AWC)
- Air Command and Staff College (ACSC)
- Air Command and Staff College Online Master's Program (OLMP)
- School of Advanced Air and Space Studies (SAASS)
- USAF Test Pilot School (USAFTPS)
- Air Force Institute of Technology (AFIT)

Air University Admission Requirements

Admission. To be admitted to the AU degree programs, an individual must

- be eligible to attend the program,
- provide proof of academic credentials, and
- obtain an acceptable score on the Test of English as a Foreign Language (TOEFL) if an international student. (See TOEFL information below.)

Selection. See AFI 36-2301, *Professional Military Education*, and/or the Education and Training Course Announcements (ETCA) for selection processes and eligibility criteria.

Proof of Academic Credentials.

- Air Force active duty, Guard, and Reserve officers selected to attend AU degree programs will have their degree status verified by the AU registrar office without action on their part.
- Civilian students must have no less than a bachelor's degree from a regionally accredited college or university.
- Sister-service and civilian students must have their official transcripts mailed to the AU registrar. Transcripts must be received by the AU registrar no later than 1 September of the academic year in which the student is attending. Mail transcripts to:

Air University Registrar
ATTN: Admissions
60 Shumacher Avenue
Maxwell AFB, AL 36112-6337

- The student is responsible for honoring the costs incurred in providing academic documents.

International Students.

- Official Academic Documents.

- International students interested in pursuing an AU degree must submit a transcript of a US bachelor's or bachelor equivalent degree. These students must submit academic documents to an independent foreign credentials evaluation service to determine if their education is equivalent to a US four-year bachelor's degree. The credentialing agency must be a member of the National Association of Credentials Evaluation Services (NACES) or the Association of International Credential Evaluators (AICE).
 - Applications for foreign credential agencies are available from the AU registrar's office.
 - An official copy of the evaluation result must be mailed to the AU registrar's office.
 - The student is responsible for honoring the costs incurred in providing academic documents.
- Portfolio.
 - International students who do not have a US bachelor's degree or equivalent may submit a portfolio to be considered for admission to an AU degree program. Information regarding the portfolio process can be obtained from the AU registrar's office.
 - Students must also submit their TOEFL result with the portfolio, if applicable. (See TOEFL information below.)
- Diploma.
 - International students selected, but who do not meet the admission requirements for the AU degree programs, will be allowed to attend the schools and will, upon graduation, receive a diploma from the school.

Test of English as a Foreign Language.

- International students from countries where the official language is English are not required to take the TOEFL.
- International students who have completed a bachelor's or higher degree in the United States during the past three years are not required to take the TOEFL.

- International students from countries where the official language is *not* English must achieve an acceptable score on the TOEFL to be admitted to the master's degree program.
- International students who have taken the TOEFL within the past two years and have met the AU minimum acceptable score or higher are not required to take the TOEFL. Student must provide an official copy of the TOEFL score to the AU registrar for admission.
- When taking the TOEFL, an individual must indicate Air University Institution Code 9069 for the official score to be sent to the AU registrar.
- The student is responsible for honoring the costs for the test.
- The minimum acceptable score for admission to the AU degree programs is as follow:
 - 83 for the Internet-based test (iBT),
 - 220 for the computer-based test (CBT), or
 - 560 for the paper-based test (PBT).

Air War College

Master of Strategic Studies and Diploma Program

Internet address

<http://www.au.af.mil/au/awc/awchome.htm>

Mission. *To prepare students to lead in a joint, interagency, and multinational environment at the strategic level across the range of military operations; to develop cross-domain mastery of joint air, space, and cyberspace power and their strategic contributions to national security; and to advance innovative thought on National Security, Department of Defense, and Air Forces issues.*

Curriculum. The Air War College resident program class membership includes officers from each US military service, civilian employees of federal government agencies, and officers from the international community of nations.

All US students will be dually enrolled in the AWC senior-level professional military education (PME) program and the Air University (AU) master of strategic studies degree program and, therefore, must meet admission requirements for the master of strategic studies degree. The AWC PME program includes joint professional military education (JPME) as defined for senior-level colleges in the Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 1800.01B, *Officer Professional Military Education Policy*. International Fellows who qualify for entry in the AWC program are enrolled in the AWC senior-level PME program and may choose to apply for admission to the master of strategic studies degree program.

Faculty. Air War College's unique mission requires a distinctive mix of faculty qualifications and credentials. Traditional civilian academics provide the depth and breadth of subject matter expertise to guarantee the academic rigor of the college's offerings while simultaneously ensuring adherence to validated pedagogical theory and practice. Military officers contribute unparalleled currency and expertise in the operations topics critical to the college's success.

Learning Outcomes.

- Critical thinkers able to analyze complex political-military situations and articulate strategic thought from a joint perspective.
- Graduates ready to lead in a joint strategic environment that thoroughly comprehend the profession of arms, with particular emphasis on Air Force competencies of air, space, and cyberspace.
- Strategic leaders who can develop and execute national military strategy that employs armed force in concert with other instruments of national power to achieve the goals of national security strategy.

Duration. The resident program consists of 10 months of graduate-level study. As the senior Air Force PME school, AWC annually educates about 240 resident students from all US military services, federal agencies, and 45 other nations.

Eligibility. Lieutenant colonels and colonels or the equivalent in sister-service rank or civil service grade are eligible to attend AWC. The Central Senior Service School Selection Board, Headquarters USAF, selects Air Force active duty officers who have demonstrated an outstanding potential for senior command and staff positions to attend AWC. Additionally, US Air Force Reserve (AFRES) officers, Air National Guard (ANG) officers, officers from other US military services, officers from other nations, and US federal civilians are selected to attend by their respective personnel systems. Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information.

Admission Requirements.

- US Students. Sister-service and civilian students provide the AU Registrar's Office with an official undergraduate transcript. Students must request this transcript directly from the college/university of the earned degree and have that institution forward it to the AU Registrar's Office.
- International Fellows. To be admitted to the master of strategic studies degree program, selected individuals must (1) present proof of academic capability by either holding a qualifying undergraduate degree (US bachelor's degree or its equivalent) or meet academic credentials admission requirements through the portfolio admission process; and (2) meet the AU score standards for the Internet-based test of the TOEFL unless from an English-speaking country and complete the iBT for scores to be submitted to the AU Registrar's Office in accordance with AU deadlines.

Graduation Requirements. Students fully admitted to the degree program must complete the following 37 semester-hour AWC resident program. Students must also achieve a grade of

“C” or higher on each academic course with an overall grade point average of at least 3.00 on a 4.00 scale. Further, they must demonstrate fully satisfactory participation in other scheduled AWC programs, to include the Global Challenge War Game, National Security Forum, and Commandant’s Leadership Series.

Resident Diploma. Students who do not meet the admission requirements for the degree program are, on a case-by-case basis, allowed to attend AWC and will, upon graduation, receive the Air War College resident diploma but will not be awarded the master’s degree. Students may not opt out of the master’s degree program after admission. Students in resident diploma status cannot be considered for the degree once diploma status is established.

International fellows receiving the diploma participate in core (6200–6800 series) and elective courses, as well as the Global Challenge War Game, National Security Forum, and Commandant’s Leadership Series. Students earning the diploma may enroll in the research course. Core courses completed for the diploma are graded on a pass/fail basis; elective courses are taken in an audit status.

Curriculum Summary

Course Number and Title	Semester Hours
RES 6100 Research	5
LD 6200 Joint Strategic Leadership	3
NSDM 6300 National Security Decision Making	3
FS 6400 Foundations of Strategy	5
WAR 6500 War Fighting	7
RCS 6600 Regional and Cultural Studies	4
GS 6700 Global Security	3
WG 6800 Global Challenge War Game (Pass/Fail)	3
EL 6000 Electives (two required)	4
Total	37

Note. All courses must be taken in residence at AWC. Courses taken in the distance learning program may not be used to satisfy course requirements of the resident master’s degree or diploma.

Course Descriptions

The AWC resident curriculum includes core curriculum and an elective program. The core curriculum consists of four major areas: leadership and ethics, international security studies, national and military strategy, and joint war fighting. The AWC resident curriculum consists of the following course offerings by the associate dean of academic programs and the Departments of Leadership and Strategy, War Fighting, and International Security Studies.

RES 6100 Research

5 Semester Hours

For the successful completion of the Research course, students select a topic from lists compiled from military agencies and work with advisors to research and to document results, recommendations, and insights. The product of that research, the professional studies paper (PSP), must not exceed 5,000 words or approximately 20 pages in length. Air University places some papers on the Internet via the AU Web site and provides copies to the Muir S. Fairchild Research Information Center and the Air Force Academy Library. Additionally, the papers are forwarded to the requesting agency or office that sponsors the research. Most research will be conducted as an individual effort, but the AWC may offer selected students the opportunity to complete this requirement via a faculty-led group research project. The Research course has the following objectives:

- Provide a venue for students and faculty to address issues of relevance and importance to military organizations;
- Assist students to conduct thoughtful, logical, and critical research and analysis;
- Share the results of student research, writing, and analysis with key decision makers; and
- Assist students, if they desire, in submitting papers for publication in Air Force, sister-service, and other professional journals and periodicals.

Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

LD 6200 Joint Strategic Leadership 3 Semester Hours

Joint Strategic Leadership is designed to introduce and develop the concepts and skills required of professional leadership through an examination of responsible command, leadership, and management practices. Successful leadership at the strategic level in today’s environment calls for unique sets of knowledge, skills, and abilities. The course of study facilitates these objectives through thoughtful reflection, critical assessment, creative thinking, and consideration of the issues found in the current volatile, uncertain, complex, and ambiguous environment. At the conclusion of the course, students will better understand the role of leaders as change agents for their organizations and the expanding challenges of leading at the strategic level. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

NSDM 6300 National Security and Decision Making 3 Semester Hours

The National Security and Decision Making (NSDM) course assesses the context and processes for developing US security strategy and policy as well as the use of the national instruments of power in support of that policy and strategy. The context assessment encompasses the overarching political and economic currents that influence global, regional, and domestic security environments. The course assesses the roles and impact of the interagency process and intelligence as well as of Congress, interest groups, the media, and public opinion in policy development and execution. The course synthesizes context and processes by analyzing threat and risk assessment and force development. To enhance the practical elements of the curriculum, the course includes several instructional periods that incorporate State Department members in the seminar environment. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

FS 6400 Foundations of Strategy**5 Semester Hours**

The Foundations of Strategy Course is designed to develop senior leaders who can think incisively about, develop, and implement strategy at the highest levels of war in the context of national policy objectives and available resources; work comfortably while considering a broad range of strategic issues that constantly change depending upon a range of circumstances at the local, national, and international levels; and work effectively in a joint and multinational environment. The course pays special attention to strategy development for the venues of air and space and to the impact of airpower on national and military strategy. The course uses seminar discussions, readings, lectures, case studies, practical exercises, and student-written briefing products to facilitate the evaluation of such themes as the challenges of strategy development, implementation, and analysis; the influence of politics across the full spectrum of warfare; the importance of local circumstances; the challenges of converting military victory into political success; the challenges of coalition warfare; and the challenges of warfare in an age of information and globalization. The course also serves as the foundation for further study in other resident courses that examine the national security decision-making process and the application of military power as a means to attain national objectives. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

WAR 6500 War Fighting**7 Semester Hours**

The Department of War Fighting develops senior leaders with the skills to plan, deploy, employ, and control US and multinational forces throughout the range of military operations with an emphasis on air, space, and cyberspace forces as they contribute to joint, multinational, and interagency operations. The War Fighting curriculum is comprised of two closely related subcourses. In the first course, Joint Forces, students synthesize and evaluate current and emerging joint war-fighting/enabling capabilities with special emphasis on the employment and sustainment of air, space, and cyberspace forces in a joint, interagency, and multinational military environment. The course analyzes how information operations are integrated to

support the national military and national security strategies as well as how information operations support achieving desired effects across the spectrum of national security threats.

In the second course, Joint Planning, students analyze the joint operation planning process through which combatant commanders set the military conditions for attaining national and coalition objectives as both a supported and supporting instrument of power. The intent is to prepare each AWC student for agile, proactive, and future-focused national security planning. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

RCS 6600 Regional and Cultural Studies

4 Semester Hours

The Regional and Cultural Studies (RCS) course is an integral part of the curriculum, preparing senior leaders to investigate, analyze, and evaluate a geographic area from a combatant commander perspective in support of international and national security policies. To meet the challenges of the Air and Space Expeditionary Force, the RCS course provides students the opportunity to evaluate an area of the world where a unified combatant commander must implement the national military strategy in support of US security policy. The RCS course provides the opportunity for students to gain unique perspectives by studying and visiting one of approximately 13 regions. During the third term, students complete 32 classroom hours (16 instructional periods) of focused academic preparation. The regional field study allows students to discuss security policy issues with senior political, military, religious, cultural, and academic leaders. Logistic and administrative preparation and travel planning for the regional field research are accomplished throughout the academic year. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

GS 6700 Global Security

3 Semester Hours

The Global Security (GS) course will examine the roles of nations in addressing key issues that shape the global environment. The course also identifies growing and emerging security

concerns beyond the military capabilities of state and nonstate actors (e.g., energy security, environmental security, migration, and population growth). The course uses a comparative approach to examine the political and economic elements of actors and their impact across a wide range of global issues. The course assesses the relationship between efforts to democratize status, economic development, and national and international security. The course also analyzes power politics from a region-to-region perspective and the impacts of these regional features with regard to international security. The GS course follows and is symbiotic with the Regional and Cultural Studies program. It capitalizes upon student experience from field study. Resident diploma pass/fail grade status for this course will be coded as “-P” after the course number.

EL 6000 Electives. All students admitted to the degree program must complete two electives. The electives program has two major objectives:

- Enhance and complement the core curriculum by providing students with opportunities to achieve greater depth and breadth of understanding in issues of special interest.
- Provide the AWC curriculum with the flexibility to adapt quickly to changes in the international and domestic security environments.

Electives

EL 6122 Directed Study

2 Semester Hours

Students interested in intensive work on a particular topic can develop, with a faculty member, a resource proposal and reading list designed to give them in-depth understanding of the subject. Enrollment is limited and requires approval of the associate dean of academic programs. Not available as an audit status course.

Leadership and Strategy Electives

EL 6441 Command and Conscience 2 Semester Hours

In a prudent and practical manner, this course examines a variety of topics of immediate professional concern to the commander. How does today's leader, for example, resolve the tension inherent in the occasional clash of command responsibility and ethical imperative? To whom or to what, for instance, does the leader owe the highest loyalty—to his superior? To the constitution? To his or her religious and philosophical judgments? Which has priority—mission or men? If integrity is—as it must be—the heart of the officer corps, it must first be examined before it can be assimilated. This course, then, inquires into the nature of military integrity. This course is offered to US students only.

EL 6442 Right, Wrong, and In-Between: Ethics and Senior Leaders 2 Semester Hours

This traditional liberal arts course emphasizes analysis of what is publicly advertised or socially accepted as “good.” It is a challenging examination of those “core values” that have, over the centuries, been the answers to the questions, “What is the best way to live?” and “What is the best way to lead?” Resident diploma students will receive audit status for this course.

EL 6443 Just War Theory and Application: Classical Wisdom and Contemporary Conflict 2 Semester Hours

Despite Clausewitz's famous dictum, “war is an act of force that can theoretically have no limits,” political, military, religious, and social leaders do seek to restrain both the occasions for war and the means of fighting. Just war theory is useful for structuring the terms of debate about the justice and injustice of particular wars and tactics. Just war theory is not a unified doctrine; there are many debates within the tradition. However, most just war theorists at least agree on a core framework for discussion. The core framework will be covered in the readings, and we will address some of the unsettled questions in just war

theory, including the following: Is there a presumption against war? Is torture ever right? What are some of the ethical issues of robotic warfare? What are some of the ethical complexities of the use of private military firms? Any question of significance to students (regarding ethics and war) will be fair game in this seminar. Resident diploma students will receive audit status for this course.

EL 6444 Expeditionary Leadership in World War II **2 Semester Hours**

Eric Larrabee's Commander in Chief course is as good a case study file of biographies of World War II leaders as appears anywhere. This course will dissect Larrabee's biographies as well as look at James Stokesbury's short history of the war to provide reference points and target sets. Resident diploma students will receive audit status for this course.

EL 6445 Legally Leading the Fight **2 Semester Hours**

This seminar analyzes the evolving responsibilities of commanders as the US military continues to prosecute the war on terrorism and carries out its missions in a developing political and legal landscape. The course focuses on the role of group and wing commanders in the interface of operations and law to support national security. Resident diploma students will receive audit status for this course.

EL 6447 Leading Change **2 Semester Hours**

Senior leaders in the twenty-first century will almost certainly be expected to manage significant change—both for themselves and their organizations. In fact, the entire concept of transformation is about change. Yet, however attractively it is packaged, individuals tend to fear change, and organizations tend to resist it, making management of change one of the most difficult leadership competencies. This course examines what goes on within the culture of organizations to accept or resist change. Using recent scholarship and case studies, the course examines examples of successful change, allowing students to develop the intellectual tools necessary

for the mediation of change. Resident diploma students will receive audit status for this course.

EL 6448 Genocide and Intervention 2 Semester Hours

This course investigates whether and how the United States might have used its instruments of power to respond before, during, and after outbreaks of genocide. It uses case studies from the holocaust, Cambodia, Rwanda, and Yugoslavia to analyze why genocide occurred, how the United States responded, and whether military force can prevent genocide. Resident diploma students will receive audit status for this course.

**EL 6449 China's Use of Force:
A Case Study of a Non-Western
Approach to Warfare 2 Semester Hours**

This course examines the ways China might use force to advance or protect its interests. It analyzes the logic of Chinese threat perception in light of calculation or miscalculation of consequences, with particular attention given to the Taiwan situation. Resident diploma students will receive audit status for this course.

**EL 6451 Visions of Future Warfare,
Past and Present 2 Semester Hours**

This course provides an opportunity to analyze and critique current visions of future warfare ranging from predictions of “fourth and fifth generations of warfare” to prophecies of twenty-first-century wars fought by robots and remotely piloted vehicles and to visions of asymmetric warfare in the cyber domain and economic sphere. The course provides a framework for assessing these predictions critically by examining the historical accuracy of past predictions of future warfare including the prewar prophets of 1880–914, the interwar thinkers of 1920–1939, Cold War planners, and the more recent advocates of a revolution in military affairs. Resident diploma students will receive audit status for this course.

EL 6455 Group Research: Blue Horizons**(Classified, US Personnel)****4 Semester Hours**

This study, led by the Center for Strategy and Technology, examines the rate of current technological change and assesses the implications for air and space power employment in the future international security environment. The study's participants will be organized into four research teams. Individual and group white papers will be produced, as well as an executive summary of the entire report. The Air Force chief of staff is the external sponsor for this study.

EL 6460 Civil-Military Relations and**Senior Leadership****2 Semester Hours**

This course examines the concept of civil-military relations as expressed in the relations between senior civilian and military leaders. Is there a clear distinction between the roles and responsibilities of senior civilian and military leaders? Are officers considered professionals in whose realm civilians are ill equipped and ill advised to meddle? Does military professionalism extend to the strategic realm of policy? These views are examined theoretically and through case studies of senior leader interaction. Students will develop their own points of view on these fundamental questions in an examination on the final day of class. Resident diploma students will receive audit status for this course.

EL 6462 Why Insurgents Win**(and Lose)****2 Semester Hours**

This course assesses the phenomenon of materially weak insurgent victories over far more powerful states by examining the relatively limited literature on this timely subject. Explanations of insurgent victories include superior political will and readiness to sacrifice blood and treasure, superior strategy, the nature of the enemy regime, and the availability of foreign assistance. Resident diploma students will receive audit status for this course.

**EL 6463 Coalition Warfare: Dealing
with Complexity and Uncertainty**

2 Semester Hours

Increasingly, one hears the lament that, in times of conflict, coalitions cause as many or more problems as they solve. However, the history of coalitions and of warfare suggests otherwise. This course challenges the notion that coalitions are the weaker form of organizing and conducting warfare. History shows that coalition warfare, when properly conceived and conducted, is the more powerful, flexible, and resilient form of warfare. Yet, coalition warfare does bring with it numerous challenges and potential pitfalls of which the military professional must be aware. Resident diploma students will receive audit status for this course.

EL 6464 Bombing to Win

2 Semester Hours

This course addresses the intellectual foundations of airpower strategy, focusing upon how the threat or use of airpower can achieve political objectives. It discusses coercion theory, the history of coercive airpower strategies, and the operationalization of these strategies in planning the use of airpower in anticipated and actual conflicts. In addition, the course evaluates the strengths, weaknesses, disappointments, and triumphs of these strategies. Resident diploma students will receive audit status for this course.

**EL 6465 Surprise and Deception
in Modern War**

2 Semester Hours

This course examines the nature of surprise and deception, their significance and limitations, and their impact on modern war. The lessons address deception doctrine, new technologies and operating concepts, and specific cases where surprise and deception may or may not have had an impact on the outcome of campaigns or wars. Resident diploma students will receive audit status for this course.

**EL 6470 The “New Mercenaries”:
The Causes and Consequences of
Military Privatization**

2 Semester Hours

This course examines the phenomenon of privatization in Western militaries, with particular emphasis on the US armed forces. It will begin by analyzing the political, economic, and technological factors that have led military organizations to outsource an increasing range of functions, from mail delivery to combat operations. Students will then consider the costs and benefits of privatization through a series of case studies that highlight the military, political, economic, and ethical issues involved. Resident diploma students will receive audit status for this course.

**EL 6472 Communicating for
Effect: Winning in the
Information Battlespace**

2 Semester Hours

Senior military leaders must understand the information environment; how it can be exploited for military gain; the statutory and policy limitations our government places on the exploitation of information and the communications channels it passes through; what effects various public affairs actions, integrated into information operations, can generate on US citizens, allies, and adversaries; what measures must be taken to safeguard information and the communications channels it passes through; and how the evolving opportunities and challenges in the information environment affect military decision making. This elective provides a broad-brushed approach to how military information operations contribute to the exploitation of the information environment in the successful mitigation of information operations. This approach explains how the unique capabilities of joint public affairs operations contribute to achieving effects to ensure successful joint force operations. Resident diploma status will receive audit status for this course.

**EL 6474 Continuous Process
Improvement (CPI) for Strategic
Leaders**

2 Semester Hours

This course is designed for highly motivated students who see the ongoing need to improve our core military functional processes. Today's military is confronted with flat (or decreasing!) defense budgets, continuing personnel shortages, and the absence of near-term solutions to recapitalize our aging equipment. Indeed, we are facing increasing pressures at all organizational levels to simultaneously operate efficiently and effectively. Utilizing books written by the most respected authors in the field of study, guest speakers, visual media, site visits, and military position papers, students will gain a detailed understanding of recent military efforts to transform to a culture of CPI. Resident diploma students will receive audit status for this course.

War-fighting Electives

EL 6539 America's Air Force

2 Semester Hours

The course examines a twenty-first-century US Air Force—its capabilities, forces, service strategies, doctrine, military operations, and unique service culture. The goal of the course is to illustrate the Air Force's strategic value to the nation. It emphasizes analyzing emerging concepts of airpower roles in the joint and coalition war-fighting environment. A field trip reinforces lesson objectives and is mandatory for elective participants. Resident diploma students will receive audit status for this course.

**EL 6540 Air Mobility and the Defense
Transportation System**

2 Semester Hours

This elective provides students a better understanding of the current and evolving capabilities of mobility and the critical role it plays and will continue to play during peace, war, and operations other than war. During the course, class members draw from historical references, student case study presentations, classroom discussion, and guest speakers to gain a

better understanding of how mobility resources and capabilities evolved, future directions in air mobility, and the impact on our current and future national security and military strategies. Resident diploma students will receive audit status for this course.

**EL 6541 Navy and Marine Corps
Expeditionary Forces**

2 Semester Hours

This course is designed to provide students a comprehensive introduction into naval expeditionary warfare. It covers current Navy and Marine Corps strategy and doctrine, emphasizing Navy/Marine Corps force planning, forces and capabilities, and military operations. Students will receive comprehensive briefings on US Navy and Marine Corps operations in support of joint strategy, participate in panel discussions and case studies, and travel on field trips for hands-on reinforcement of lessons. Resident diploma students will receive audit status for this course.

**EL 6542 Command and Control of
Air and Space Power**

2 Semester Hours

This course is designed as a base-level introduction of past, current, and future issues concerning the joint force air component commander (JFACC). It is specifically intended for operators who may be assigned to a JFACC or joint air operations center (JAOC) staff. This course addresses the roles, operations, command relationships, and responsibilities of the JFACC in support of a joint force commander (JFC). It is not intended for experienced JFACC or JAOC staff officers. A blue-ribbon panel of retired general officers with expertise in command and control and the application of air and space power will mentor students in this course. Resident diploma students will receive audit status for this course.

EL 6543 America's Army

2 Semester Hours

This course is specifically designed for non-Army students who want to gain greater understanding about the Army. The Army is thoroughly explored, with a strong emphasis on how

history and heritage influence current force and doctrine. Students will gain a comprehensive awareness of Army culture and develop an appreciation for what the Army can provide to a regional combatant commander or joint task force commander. This course builds a solid foundation of knowledge about the Army, including its force structure and capabilities, doctrine, terminologies, and idiosyncrasies. Students analyze and evaluate Army doctrine relative to their own service and the joint community. The goal is to ensure students understand what it looks, feels, and smells like to be a soldier. The class culminates with a three-day practical exercise/map exercise to validate classroom instruction. Resident diploma students will receive audit status for this course.

**EL 6544 Intelligence, Surveillance, and
Reconnaissance (ISR) for the War
Fighter (Classified, US Personnel) 2 Semester Hours**

Joint Vision 2020 calls for decision superiority—making and implementing better decisions faster than the adversary can react. Decision superiority is only achieved through the full integration of ISR operations into the military campaign. This course addresses ISR as a weapons system for strategic and operational campaign planning and execution: the intelligence mission, organization, activities, and processes; how ISR operations are integrated into air and space operations; capabilities and limitations of the seven intelligence disciplines; and challenges of meeting the increasing information needs of commanders, planners, and operators.

**EL 6545 Special Operations: Then
and Now (Classified, US Personnel) 2 Semester Hours**

This course provides an understanding of the organization, capabilities, and missions of US special operations forces (SOF) with particular focus on their support to the combatant commanders. It provides an awareness of the roles of the assistant secretary of defense for special operations and low-intensity conflict and the Joint Staff J-3 Special Operations Division (J-3 SOD). The course analyzes the integration of joint SOF capabilities with conventional forces; looks at SOF equipment,

training, and support; and considers mission employment, civil affairs, and psychological operations.

EL 6546 Total Force

2 Semester Hours

From the initial vantage point of a historical review of the Air National Guard (ANG) and Air Force Reserve (AFRES), students engage in discussions surrounding the compelling issues affecting the total force today and through the next decade. Some suggest that we will transition to a militia nation once again. What is the right force mix for the active and reserve components? The course will include a sampling of outside speakers, field visits, and teleconferences with the top leaders of the Air Reserve components. It will give students the opportunity to establish multidimensional views on the issues at hand. Resident diploma students will receive audit status for this course.

**EL 6548 Intelligence, Surveillance, and
Reconnaissance (ISR) Requirements for**

Cyberspace (Classified, US Personnel) 2 Semester Hours

This course explores the concept of ISR and cyberspace as a domain, starting with doctrine, definitions, and threats. Legal challenges based on laws and directives will also be covered as well as sister-service perspectives on cyberspace.

**EL 6550 Combating Weapons of Mass
Destruction in the DOD**

(Classified, US Personnel)

2 Semester Hours

This course examines chemical and biological warfare issues and addresses challenges posed by adversaries employing chemical and biological weapons to the successful execution of USAF roles and missions. The course analyzes threats posed by state and terrorist actions and alternative USAF responses to each in various scenarios.

**EL 6551 Group Research: Nuclear
Threats and Countermeasures
(Classified, US Personnel)**

4 Semester Hours

Nuclear weapons have played a significant role in our national security for more than 60 years and will continue to be critical in our defense strategy for the foreseeable future. However, recent incidents within the Air Force have exposed what the Blue-Ribbon Review of Nuclear Weapons Policies and Procedures referred to as “an erosion of the culture of ‘nuclear excellence.’” Students will examine and research the evolution of the nuclear enterprise and focus on state and nonstate nuclear challenges to the United States and our allies, as well as on appropriate countermeasures to such threats. The culmination of student research efforts will be a briefing to the USAF Combat Planning Council sponsors to include the leadership of HQ USAF/A-10.

**EL 6552 Strategy, Technology,
and War**

2 Semester Hours

Military innovation requires technology as well as the right people to put in place the appropriate doctrine and organizational structures and processes. This framework can be used to analyze past innovations and deduce lessons for implementing future innovations. This course examines the relationship between strategy and technology and the impact of technological breakthroughs on military strategy. The last portion considers future technologies, particularly those related to the genetics, nanotechnology, and robotics revolution, using recent works by Raymond Kurzweil, Joel Garreau, and J. Storrs Hall. Resident diploma students will receive audit status for this course.

**EL 6553 National Reconnaissance
Office (NRO): An Independent
Space Force**

2 Semester Hours

The National Reconnaissance Office is grounded in our nation’s need for strategic reconnaissance. After World War II, the Air Force began to investigate the feasibility of a reconnaissance satellite; such a spaced-based system would complement exist-

ing airpower capabilities. From these initial aspirations, the Eisenhower administration created the foundations for the first independent space force: the NRO. The course begins with overviews of early technological innovations and their impact on strategy by Michael Howard and transitions to Roy F. Housh's Industrial Age case study of theater strategic reconnaissance in the American Civil War. These are followed by a discussion of the history of technology by Melvin Kranzberg and a few insights regarding NRO acquisition by Lee Battle, Jr. Resident diploma students will receive audit status for this course.

EL 6554 Space Operations
(Classified, US Personnel)

2 Semester Hours

This course focuses on military applications of space systems to include capabilities, limitations, dependencies, vulnerabilities, policies, law, and doctrine. The course provides an understanding of current space systems and how space supports the war fighter. Current space issues in a variety of areas are discussed to provide an understanding of the issues facing senior leaders in applying space power. The readings cover background information on space characteristics, limitations, organizations, missions, functions, and contributions to war fighting.

EL 6558 Terrorism

2 Semester Hours

Terrorism is one of the oldest of military tactics and forms of warfare. Historical evidence dates it to 5000 BC. The root word for *terrorism* appears in ancient Greek, Roman, and Sanskrit languages. In more modern times, however, terrorism has become the most frequent form of conflict. This course examines why terrorism has reerupted; the implications for political, economic, military, cultural, and religious institutions; the increasing lethality of terrorist acts; and the prospects for resorting to nuclear, biological, radiological, and chemical weapons. It also addresses the capabilities and limitations of governmental authorities and what the future may hold for deterring terrorism. Resident diploma students will receive audit status for this course.

EL 6560 Homeland Security and Defense (Classified, US Personnel) 2 Semester Hours

This course examines the threats to and vulnerabilities of the US homeland and the actors, organizational structures, plans, policies, programs, and resources required to secure and defend the country. During the Cold War era, only sovereign nations could create mass casualty and society-destroying events. Today, individuals and small groups can inflict this type of misery. Given this asymmetric threat, homeland security and defense have become the nation's top priorities. We must have a strategy to protect and defend our nation. The al-Qaeda attacks on the World Trade Center and the Pentagon on September 11th, subsequent anthrax attacks, thwarted 2006 airline mishaps, and ongoing war on terrorism all highlight the need to secure and defend the American homeland.

EL 6581 Medical Support to Joint Operations 2 Semester Hours

This elective examines the challenges and capabilities of the Air Force Medical Service (AFMS) in support of military operations. The course emphasizes medical readiness, expeditionary medical support, and medical operations during deployments. Medics have participated in multiple humanitarian relief operations and are integral to responding to chemical and biological attacks. With today's higher deployment rates, the AFMS must be prepared to cover the entire spectrum of military operations. Resident diploma students will receive audit status for this course.

EL 6582 Nonlethal Weapons: Support to Twenty-first-Century Warfare and Homeland Defense 2 Semester Hours

This course describes and analyzes the efforts and the issues that underlie nonlethal weapons. It addresses previous use of these weapons, defines capabilities that could be made available to our armed forces, analyzes their incorporation into US military doctrine and strategy, and examines the medical, legal, and public awareness issues involved in their

development and use. Resident diploma students will receive audit status for this course.

**L 6588 Strategy and
Information Warfare**

2 Semester Hours

This seminar considers when, where, why, and how information warfare is conducted. It examines early views of information warfare, theories of information warfare (reflexive control and the observe, orient, decide, act, loop process), the tools of information warfare, the information warfare battlespace (hacker war, industrial espionage, and terrorist use of cyberspace), Chinese theories of information warfare, and the development of an information warfare campaign. Resident diploma students will receive audit status for this course.

**EL 6590 JCLASS Blue Team
(Classified, US Personnel)**

4 Semester Hours

**EL 6591 JCLASS Red Team
(Classified, US Personnel)**

4 Semester Hours

The Joint Land, Aerospace, and Sea Simulation (JCLASS) course is a future war game that focuses students' attention at the operational and strategic levels of warfare. Selected students from the senior-level war colleges participate in the war game. Air War College contributes two teams to the effort. The "Blue Team" plays the role of USCENTCOM's Joint Planning Group and is responsible for developing options in response to regional crises in their area of responsibility. The "Red Team" plays the role of Iran's senior leadership by developing a national security strategy to survive and thrive in the Middle East. The game is divided into a distributive phase and an actual war-fighting phase. In the distributive phase, students will collaborate and plan with AWC counterparts using the CFast™ web-based tool. The actual war game will bring all students together at Maxwell Air Force Base's War Gaming Institute to allow them to execute their plans in a dynamic environment. JCLASS Phase I consists of 30 contact hours over 10 instructional periods, and JCLASS Phase II involves 30 hours during the six-day exercise. Enrollment in this course is through the JCLASS course director only.

**EL 6595 Group Research: Space
Issues (Classified, US Personnel)**

2 Semester Hours

The AU National Space Center examines a different space-related topic each year. One past topic was the impact on the US economy if space superiority is lost. Each student will write a professional studies paper on a focused area that derives from the year's overarching topic.

**EL 6596 Group Research: Cyberspace
and Information Operations
(Classified, US Personnel)**

4 Semester Hours

The purpose of this seminar—led by the Cyberspace and Information Operations Study Center—is to focus on the integration of information operations (electronic warfare, network warfare, and especially influence operations) supporting a joint force commander. Issues ranging from the technical/scientific through the ethical/legal will be discussed. Students write their PSP on an information operations topic related to research projects from Cyber Command, Eighth Air Force, and other organizations.

International Security Studies Electives

EL 6743 Globalization

2 Semester Hours

This course examines the political, economic, cultural, and demographic implications of globalization. It views the phenomenon from both Western and non-Western perspectives to illuminate the main arguments for and against globalization. Resident diploma students will receive audit status for this course.

EL 6745 US Grand Strategy

2 Semester Hours

As the United States enters the twenty-first century, how should it use the resources at its disposal to preserve and enhance its long-term interests? What is America's role in the world? In other words, what should America's grand strategy be? This course tackles this question by analyzing and evaluating the different ways the United States has conceived of and implemented its grand strategic designs since it emerged as a

world power at the start of the twentieth century. The purpose of the course is to critically examine the fundamental ideas that have underpinned America's attempts to make itself more secure to better understand what the United States' grand strategy should be today and in the future. Resident diploma students will receive audit status for this course.

**EL 6746 Psychology of
Decision Making**

2 Semester Hours

How do people make decisions? What mistakes do decision makers often commit? What can a person do to become a better decision maker? The purpose of this course is to explore how psychologists answer these questions and what they have to offer. It will also examine how information overload, organizational culture, personality, propensity for risk taking, and stress influence decision making. Resident diploma students will receive audit status for this course.

EL 6747 Cultures of Violence

2 Semester Hours

This elective addresses the issues relating to societies in which violence appears to be endemic. Using examples from such diverse environments as El Salvador, Jamaica, Yemen, East Africa, and West Africa, it studies how groups such as the cattle raiders of Karimojong and the "gangster warriors" of Liberia and Sierra Leone turn into chronically violent entities. The course also analyzes the impact of weaponization upon these groups, with particular emphasis on how light weapons proliferation helped to encourage the creation of "Kalashnikov cultures." Resident diploma students will receive audit status for this course.

**EL 6750 Negotiation Theory
and Application**

2 Semester Hours

This course develops skills necessary to successfully negotiate conflict resolution, treaties between countries, budgets between services, and memoranda of understanding (MOU) between agencies. Considerations will be given to cross-cultural factors, time constraints, negotiation styles and strategies, and

profiling of involved parties. Topics to be covered include logical analysis, group problem solving, conflict management, and methods of persuasion. This course emphasizes negotiation skills and theory and assumes that students have little knowledge of this subject. Resident diploma students will receive audit status for this course.

**EL 6752 Cultural Perspectives
in Negotiations**

2 Semester Hours

This course develops skills necessary to successfully negotiate conflict resolution, treaties between countries, budgets between services, and MOUs between agencies. Emphasis will be given to cross-cultural factors, time constraints, negotiation styles and strategies, and profiling of involved parties. Topics to be covered include logical analysis, group problem solving, conflict management, and methods of persuasion. This course assumes students have basic knowledge in this topic. Resident diploma students will receive audit status for this course.

**EL 6754 Central Intelligence Agency
Roles, Missions, and Military Support
(Classified, US Personnel)**

2 Semester Hours

Intelligence—accurate and timely information about unfolding world events and international concerns or threats—is crucial to the successful conduct of US foreign policy. In the post-Cold War period, the United States may exercise even greater influence in international affairs than it did previously. Yet, the dynamics of international relations are more complex, and the perception of threats to US interests may be less obvious. While US policy makers will continue to rely on intelligence to make judgments and decisions, the role of intelligence—with its need for secrecy and occasionally extralegal activities—presents many dilemmas for a democratic society.

EL 6756 Conduct of Diplomacy

2 Semester Hours

This course deals with diplomacy as an instrument of power. It examines not only the diplomatic processes and procedures by which nations communicate and conduct their affairs but

also programs and issues comprising modern diplomacy. These include economic and military assistance, intelligence collection, public diplomacy, human rights, political change, and economic pressure. Resident diploma students will receive audit status for this course.

EL 6758 International Rivals: Leaders and Strategic Cultures in Potential Adversary States (Classified, US Personnel) 2 Semester Hours

This course looks at the leaders and strategic cultures of countries and groups of concern to US national security. Addressed will be the political-psychological profiles of the leaders of Iran, Syria, China, Russia, and North Korea and various terrorist organizations like the Kurdistan Workers Party, the Islamic Jihad, Hezbollah, and Osama bin Laden's organization. Who are these leaders and what formed their worldview? What values and ideas do they espouse and how can they be influenced? Who in their regime or group makes what kinds of national security decisions and why? How can they be deterred from war or escalation? What is their military doctrine, and what are their military capabilities? How have they used force in the past, and what is their relationship to other states in their region and to the United States?

EL 6780 Peace and Stability Operations 2 Semester Hours

The North Atlantic Treaty Organization, spearheaded by the USAF, stopped Serbian forces from ethnically cleansing 1.8 million Kosovo Albanians. Could international organizations (IO), such as NATO or the United Nations (UN), have stopped the genocidal killing of 800,000 Rwandans in 1994? In this course, students examine the role of IOs, particularly as guarantors of peace and security, and come to understand what they can and cannot do. US armed forces have acted often within the framework of IOs (within NATO in Kosovo and Bosnia and the UN in Macedonia and Haiti), or with the endorsement of IOs (the UN in Operation Desert Storm). Thus, a strategic military thinker must be cognizant of IOs and their functions. The course starts with the UN and recent cases of

peacekeeping, moves to regional organizations (including NATO and the European Union), and finally deals with nongovernmental organizations and their role in conflict prevention and resolution. Resident diploma students will receive audit status for this course.

**EL 6784 Latin American
Security Issues**

2 Semester Hours

Latin America includes a host of distinctive nations with unique characteristics. At the same time, the region has collectively undergone developmental experiences that provide a rich basis for comparison and consideration. Latin America's record of development has generated several challenging circumstances that give rise to public insecurity, political unease, and the search for meaningful solutions to the problems of poverty and inequality. This course examines the major political and economic drivers that shape Latin America's strategic security environment and govern the region's prospects for security. We examine several recent key conflicts and the measures taken by regional and external actors to respond. The course concludes with a consideration of the region's energy future and potential impacts for development and security. Resident diploma students will receive audit status for this course.

Additional Programs

WG 6800 Global Challenge War Game 3 Semester Hours

AWC conducts this six-day unclassified capstone war game (set 10 years in the future) at the strategic and operational levels with full play by every student and the faculty. As a summative application of the knowledge, skills, and attributes gained during the academic year, the Solo Challenge (SC) mission focuses on experiential learning verses doctrinal experimentation and research. With that mission, it challenges students to assess (critically think, creatively address, and decisively communicate) complex scenarios in a time-constrained environment, prepare and defend courses of action, and pursue national objectives using all the instruments of national power (diplomatic,

informational, military, and economic) while applying an understanding of regional cultural issues as directed by the SC president (a faculty member). Faculty teams and subject matter experts manually adjudicate game play to ensure synthesis of critical issues affecting national policy within the various regions of the world. The faculty's mission in directing game play and adjudicating student actions is to shape game inputs that realistically reinforce joint professional military education and AWC learning objectives. As objectives are met, the game continues its spiral development by presenting continual challenges to test students' critical thinking and synthesis of the instruments of national power. To this end, SC supports these objectives:

- Distinguish the uniqueness of strategic-level leadership and apply competencies required by strategic leaders;
- Evaluate the national security challenges and opportunities in a future operating environment;
- Apply elements of national power in designing effects-based plans;
- Apply national security and national military strategies in developing plans to achieve desired effects across the full range of military operations;
- Evaluate the role of air, space, and cyberspace power in joint, unified, interagency, intergovernmental, and multinational operations;
- Synthesize theater strategies, estimates, and campaign plans to employ military power in a joint, unified, interagency, intergovernmental, and multinational environment; and
- Synthesize critical elements, enablers, and processes that define the strategic environment in peace and war.

NSF 6810 National Security Forum. The National Security Forum (NSF) is an event sponsored by the secretary of the Air Force and hosted by AWC during the week before graduation. It is the capstone event of AWC's academic year. The NSF brings

together approximately 110 civilian leaders with diverse backgrounds from locations around the United States to join with the AWC class. The primary objective of the NSF is a frank and candid exchange of views on national security matters among the invited guests, AWC students, and senior military and civilian leaders. The week is devoted to exploring the many issues that affect the current and future security of our country, focusing heavily on the role of air and space power as an instrument of national security. The forum's distinguished speakers, seminars, and social functions serve to broaden and solidify the participants' understanding of air and space power and national security issues.

CLS 6820 Commandant's Leadership Series. The commandant and dean of academic affairs invite up to 25 distinguished speakers to address the class throughout the academic year. Speakers come from the highest levels of government, military services, the press, nongovernmental organizations, and industry. They are also selected based on their stature (former prisoners of war or Medal of Honor recipients) or for their expertise on current issues. The speakers integrate leadership themes or issues with which senior leaders should be familiar. Student preparation includes critical listening, questioning the speaker, and seminar discussions. The Department of Leadership and Strategy administers this core-course curriculum.

Language Programs. The English as a Second Language (ESL) course is taught by the International Officer School for selected international officers only and provides intensive work in the English language. Language familiarization classes taught by the Defense Language Institute (DLI) provide familiarization with the languages taught. Enhanced familiarization courses are offered once the prerequisite basic course is completed. Because these language courses are optional and not graduate level, they do not count toward the master's degree or AWC graduation requirements. These noncredit, nongraded courses are German, Swahili, Arabic, French, Mandarin Chinese, Spanish, Russian, and Persian Farsi.

Air Command and Staff College

Master of Military Operational Art and Science Degree

Resident Program

Internet Address

<http://acsc.maxwell.af.mil>

Mission. *Prepare field-grade officers to develop, employ, and command air, space, and cyberspace power in joint, multinational, and interagency operations.*

Curriculum. The Air Command and Staff College (ACSC) curriculum is designed to develop higher-order thinking within the context of the war-fighting profession by challenging students to think critically and exercise a combination of analytical and practical tools required of field-grade officers (FGO) serving in operational-level command headquarters staff positions. ACSC courses emphasize applying air, space, and cyberspace power in joint campaign planning and the operational art of war.

The primary form of instruction in the resident program is through seminars held in specially designed rooms featuring closed-circuit television, an array of multimedia equipment, and student access to a college-wide computer network and the Internet. Students receive more than 80 books to expand their professional knowledge and a personal laptop computer to keep track of the academic schedules, online reading assignments, examinations, research, and other writing requirements throughout the academic year.

Learning Outcomes. ACSC's resident program builds upon the knowledge and skills imparted through basic developmental education (BDE) and experiences gained as a company grade officer, delivering educated field-grade officers prepared to develop, employ, and command air, space, and cyberspace power in joint, multinational, and interagency operations. The ACSC program produces FGOs who

- are capable command and staff leaders who understand operational and strategic leadership in a joint, whole-of-government, and multinational context;
- possess well-developed analytic capabilities and creative/innovative thought processes;
- are well versed in joint and service perspectives and understand joint planning and operations within the context of operational art across the range of military operations;
- are well grounded in military history, theory, and doctrine across the range of military operations;
- comprehend the US national strategic decision-making process and how the actors and systems translate policy into action through use of the instruments of power;
- comprehend regional expertise and cultural competence as war-fighting enablers; and
- communicate effectively, both verbally and in writing (succinct, comprehensive, and accurate accounts of operational-level issues).

Faculty. ACSC employs a blend of expert faculty members exceptionally qualified to accomplish its mission and goals. The college's unique mission requires a distinctive mix of faculty qualifications and credentials. Traditional civilian academics provide the depth and breadth of subject matter expertise to guarantee the academic rigor of the college's offerings while simultaneously ensuring adherence to validated pedagogical theory and practice. Military officers contribute unparalleled currency and expertise in the operations topics so critical to the college's success.

Duration. The resident program consists of 10 months of graduate-level study. As the center for US Air Force intermediate developmental education (IDE) and as a joint-accredited institution for providing the first phase of joint professional military education, ACSC annually educates about 500 students from all US military services, selected federal agencies, and international officers from over 60 different nations.

Eligibility. Air Force candidates who attend ACSC's resident program are selected in conjunction with their O-4 promotion boards. A central PME-selection board, with major command input, selects the actual college class from these candidates based on their demonstrated potential for assignment to key field-grade command and staff positions. Sister-service O-4, O-4-select (or equivalent rank), and GS-12 and GS-13 (National Security Personnel System Permanent [NSPS] Pay Band Two and above) government civilians are eligible to attend ACSC and are selected by their respective personnel systems.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA Course number: MACSC001.

Admission Requirements. To be admitted to the master of military operational art and science degree program, individuals must (1) present proof of academic capability either by holding a qualifying undergraduate degree from a regionally accredited college/university (US bachelor's degree or its equivalent) or meeting academic credentials admission requirements through the portfolio admission process, and (2) provide an acceptable score on the Test of English as a Foreign Language (TOEFL) unless they are from an English-speaking country.

International students not meeting the admissions requirements for the master's degree program will be allowed to attend ACSC and will, upon completion of the resident program with a cumulative grade point average of 2.7 or higher, receive the ACSC resident diploma but will not be awarded a master's degree.

Graduation Requirements. Students fully admitted must complete the following 33-semester-hour ACSC resident program. Students must achieve a grade of "C" or higher on each academic course with an overall grade point average of 3.00 on a 4.00 scale and demonstrate fully satisfactory participation in other scheduled ACSC programs and activities to earn the master's degree.

Curriculum Summary

Course Number and Title	Semester Hours
OC 5510 OC 5510 Orientation Course	Noncredit
LC 5502 LW 5510 Leadership and Warfare	3
LC 5510 LC 5510 The Practice of Command	3
NS 5500 NS 5510 International Security Studies	3
WS 5510 Warfare Studies	3
AP 5510 Air, Space, and Cyberspace Power Studies	3
JF 5510 Joint Forces	3
JP 5510 Joint Planning	3
JA 5510 Joint Air and Space Operations	3
CS 5510 Regional/Cultural Studies	3
RE 5612 Research/Electives I	3
RE 5613 Research/Electives II	3
GE 5510 Gathering of Eagles	Noncredit
Total	33

Note: Courses in the nonmaster's distance learning program may not be used to satisfy course requirements of the resident master's degree program.

Course Descriptions

OC 5510 Orientation Course

Noncredit

The Orientation Course (OC) provides an overview of the ACSC program for joint education; US Air Force educational methodologies, policies, curriculum, and research requirements; and key principles and concepts that students encounter throughout their academic experience. The program includes an introduction to small-group dynamics, communication and critical-thinking skills, the technology employed within the program, student responsibilities and requirements, and additional services that are available to enhance student success.

LW 5510 Leadership and Warfare

3 semester hours

The Leadership and Warfare (LW) course analyzes factors that guide the action of military leaders in establishing and maintaining an effective leadership environment. The course educates and inspires students to reach their full leadership

potential through the study of great commanders and their conduct of warfare and current problems of command in contemporary joint operations. Through these studies, students gain a unique understanding of the specific leadership challenges that leaders face in guiding people and organizations through crises and environments of change.

LC 5510 The Practice of Command 3 semester hours

The Practice of Command course allows students to reflect on their personal philosophy on the art and craft of command, honing that philosophy through interaction and the study of responsibilities and challenges unique to commanding an Air Force squadron. The course introduces students to the resources available to assist squadron commanders with their duties and stresses how important it is for commanders to meld their personal philosophies of command with the unique requirements of their situation and their responsibilities to their service, mission, people, and themselves.

NS 5510 International Security Studies 3 semester hours

The International Security Studies course provides a foundation for understanding the international security environment, its implication for the United States, and how the United States both shapes and responds to this environment. The course also examines the instruments of power (IOP) and how they are wielded by both state and nonstate actors to affect the international environment. In addition, the course examines the US national strategic decision-making process, examining how the actors and systems translate policy into action through the use of the IOPs.

WS 5510 Warfare Studies 3 semester hours

The Warfare Studies course introduces students to the canon of military theory, focusing on such issues as the nature of war, the levels of war, the range of military operations, military strategy, and operational art. It looks specifically at traditional forms of

warfare but also examines such alternative forms as guerilla warfare, insurgency, and counterinsurgency.

**AP 5510 Air, Space, and Cyberspace
Power Studies**

3 semester hours

The Air, Space, and Cyberspace Power Studies (AP) course enhances students' understanding of military theory by introducing perspectives on war fighting with specific emphasis on air, space, and cyberspace power. It looks specifically at the development of air, space, and cyberspace power and examines the organizations and strategies that have been involved in their employment. In addition, the course analyzes the role these elements might play in future operations.

JF 5510 Joint Forces

3 semester hours

The Joint Forces (JF) course presents the joint and service doctrinal perspectives that guide joint force commanders and their staffs as they seek to achieve assigned theater security objectives. The course provides an overview of joint force organizational structures and the framework within which joint forces are created, employed, and sustained. It also examines each of the military services, exploring their capabilities and limitations. In addition, the course analyzes the ways in which joint force commanders integrate service and functional component command support to achieve success at the operational level of war.

JP 5510 Joint Planning

3 semester hours

The Joint Planning (JP) course introduces students to the complexities and requirements of joint planning. Students study pertinent doctrine and the joint operation planning process, analyze the challenges joint force commanders face in attaining unified action, and examine ways in which operational art and design are applied to achieve objectives. Additionally, the students examine planning considerations across the range of military operations. The course culminates with students synthesizing what they have learned to create key elements of a campaign plan.

**JA 5510 Joint Air and
Space Operations**

3 semester hours

The Joint Air and Space Operations (JA) course introduces students to the people, processes, and products involved in planning, directing, and executing joint air operations in support of joint force commanders' campaign plans. The course specifically focuses on the important role of the JFACC, looking at the doctrinal responsibilities of that position and the actors, processes, and products that comprise the JFACC's air operations center. Equipped with this understanding, students analyze the employment of air and space power across the full range of military operations.

CS 5510 Regional/Cultural Studies

3 semester hours

The Regional/Cultural Studies (CS) course introduces students to regional and cultural factors and discusses how these factors motivate actors within the international security environment. Through this course, students grasp the important role that culture plays in determining operational success. Students are also exposed to the unique ways in which their own cultural perspectives influence both their outlook and interaction with other societies. Through this experience, students come to understand the unique security challenges and opportunities posed by culture and how best to respond to ensure success.

RE 5612 Research/Electives I

3 semester hours

The Research/Electives I program complements ACSC's core curriculum, providing an opportunity for students to investigate topics of particular interest in a rigorous fashion under the direction and guidance of a subject matter expert. Through this program, students develop their ability to define an issue succinctly; conduct thoughtful, logical, and critical research and analysis; and create well-supported conclusions and recommendations of potential benefit to today's war fighters.

RE 5613 Research/Electives II**3 semester hours**

The Research and Electives II program complements ACSC's core curriculum, providing an opportunity for students to investigate topics of particular interest in a rigorous fashion under the direction and guidance of a subject matter expert. Through this program, students develop their ability to define an issue succinctly; conduct thoughtful, logical, and critical research and analysis; and create well-supported conclusions and recommendations of potential benefit to today's war fighters.

GE 5510 Gathering of Eagles**Noncredit**

The Gathering of Eagles (GOE) is a unique course that stimulates the study of air and space history. While at ACSC, the Eagles gather with students and participate in teaching interviews. These interviews allow students to understand their heritage and learn lessons about air and space leadership from those who shaped it. Research conducted by students in the GOE Research Seminar forms the basis for the content of this course.

Other Programs and Activities

The Air Command and Staff College conducts several activities that support the resident core curriculum and enrich the experience of its students and their families during the academic year. These programs are listed below.

Domain Operations Concentration (Honors). The Domain Operations Concentration is an advanced honors program open to a limited number of selected students that centers on the planning, execution, and integration of air, space, and cyberspace operations. Focusing on real-world operations and current best practices in all three domains, the program includes a number of hands-on, experiential learning opportunities. The intent is to prepare the selected students for future operational and command assignments that require advanced knowledge and synthesis of the capabilities, methods, and challenges associated with operations within and across air, space, and cyberspace. The concentration will specifically address both planning and execution in each of the three do-

mains in question separately as well as drive the participating students to integrate across domains to analyze and resolve a range of operational challenges.

Commandant's Speaker Series. These special presentations enhance the resident curriculum by giving students and faculty the opportunity to interact with distinguished leaders and experts across political, economic, and military environments. Speakers, past and present, include members of Congress, ambassadors, and top civilian and military leaders in the DOD.

International Officer Program. International officers have attended ACSC annually since 1946. During its 54-year history, the college has graduated more than 2,500 international officers from 92 nations. Before attending this college, international officers attend a six-week preparatory course conducted jointly by the International Officer School (IOS) and ACSC. This course increases the officers' ability to speak and understand the English language while familiarizing them with the US Air Force organization and mission. During their stay, international officers participate in field trips that supplement the curriculum objectives.

Special Operations Command Exchange. In response to a Special Operations Command (SOCOM) request that ACSC provide a cadre of students with joint planning expertise to SOCOM as part of an experiential learning opportunity, ACSC will send annually four students and an instructor or five students (depending on year and faculty availability), all of whom must meet the qualifications requested by SOCOM, to the Center for Special Operations for assignment to planning staffs/offices as best suits SOCOM's needs. Students will be selected via an application and interview process conducted by the Joint Warfare Department.

Embassy Immersion Program. Students enrolled in ACSC's Political-Military Affairs Strategist elective course may apply for admission to the CSAF Political Advisor (POLAD) Embassy Immersion Program. Selected students, currently seven from each class, are assigned by the CSAF/POLAD to work on the civilian side of US embassies and missions and in the Department of

State for five weeks during the spring semester. The students are matched with countries by the secretary of the Air Force/POLAD. The students are deployed in the spring of the academic year, and after their return, they submit a short paper and give a briefing about their experience.

Athletic Program. The ACSC athletic program is designed to improve the quality of life for students and faculty by creating and sustaining an environment that promotes personal health, fitness, and professional growth. With that in mind, the program helps personnel to pass the fitness test on their first attempt and to install a program that combines social interaction and team building with healthy competition. The athletic program includes competitive seminar and intramural sports. It also includes mandatory participation in school-scheduled sports activities by all 40 flights. Students and faculty compete in base intramural activities as well. They are required to engage in personal fitness/aerobic activities at least three times each week. ACSC conducts annual fitness testing in accordance with AFI 40-501, *Air Force Fitness Program*.

Spouse Program. The Spouse Program helps to integrate resident student spouses into the ACSC experience. It offers many opportunities for spouses to learn, grow, and share this experience with students and faculty. In addition to various social events, this program acquaints spouses with the college's academic requirements, increases their awareness of current events and DOD issues, and provides opportunities for their personal growth and development. Participation is completely voluntary, and the spouses determine the program's scope and direction.

Air Command and Staff College Online Master's Program

Master of Military Operational Art and Science Degree

Internet Address

<http://www.au.af.mil/au/dlmasters.asp>

Mission. *Prepare field-grade officers to develop, employ, and command air, space, and cyberspace power in joint, multinational, and interagency operations.*

In January 2010 the Air Force decided to leverage the success of the existing ACSC online master's program (OLMP) and began to offer more tailored and expanded professional education opportunities to midlevel captains under a new "concentration" construct. Within this construct, seven of the existing OLMP courses (21 credit hours) comprise the core curriculum required of all students.

Majors, major-selects, and civilian equivalents enrolled in the program pursue a joint warfare concentration which consists of the core curriculum, an additional leadership course, and three joint-focused courses.

For captains enrolled in the expanded program, the core curriculum is supplemented by 12 credit hours of concentration courses that examine specific educational/professional areas. The first new concentration to be implemented, the "Leadership" concentration, includes four leadership courses specifically designed to meet the developmental needs of captains.

The Joint Warfare and the Leadership concentrations mirror the ACSC resident program's learning outcomes through asynchronous online interaction between faculty and students. Asynchronous online discussions replace the seminar discussions that are a hallmark of the resident course. Students are guided by credentialed instructors, handpicked for their academic expertise and/or operational experience.

The OLMP, a paradigm-shifting innovation, is now the benchmark for distributed learning professional military education (PME). The program continues to grow because students value

the “deep-thinking” educational experience. This globally accessible, resident-like, student-centered education provides higher-order thinking within the context of the war-fighting profession. More than 1,100 students are currently enrolled, with 438 graduates to date.

Students graduating from the Joint Warfare concentration will receive intermediate-level PME (nonresident) and joint professional military education (JPME) Phase 1 credit along with an accredited master of military operational art and science degree.

Captains graduating from the Leadership concentration will receive an accredited master of military operational art and science degree but will not receive IDE or JPME credit. However, once selected for promotion to major, students are eligible to complete their IDE and JPME requirements and receive credit.

Curriculum. The curriculum is designed to produce a more effective officer serving in operational-level command or staff positions. The more successful officers are those who possess and demonstrate abilities in several diverse areas, including academic, personal, professional, and interpersonal. The program fosters the ability to encourage the development of higher-order thinking by challenging students to think critically and to exercise a combination of analytical and practical tools required as leaders charged with the nation’s defense. Courses place special emphasis on applying air, space, and cyberspace power in joint campaign planning and the operational art of war.

Both concentrations are separate from ACSC’s traditional distance learning nonmaster’s program; it is not an addendum to it. The OLMP curriculum covers such topics as contemporary Air Force operations, national security, leadership, and joint warfare challenges and opportunities. Due to the level of work required, beginning students are only allowed to take one course each term; however, they may be approved to take two courses each term after they have successfully completed their first three courses. Each course requires 10 to 15 hours of work each week. Tuition is free, and there is no active duty service commitment associated with the program; however, students incur the cost of required books, a personal computer, and Internet connectivity.

Students who work steadily should complete their master’s degree in two years; however, students have up to five years to

meet degree requirements. Due to the inherent flexibility of the program, student deployments, unique duty schedules, and/or job/personal demands while enrolled can be easily managed. Since members must enroll for each term, students can manage their course schedules to better coincide with personal/professional commitments.

The courses are hosted on the Blackboard® Learning Management System and are facilitated by adjunct instructors who have been selected, trained, reviewed, and credentialed by ACSC. Assessments are submitted online, and confidential instructor feedback is returned to students to assist them in improving both their understanding of course materials and their communication skills.

As previously mentioned, upon successful completion of the program, students earn an accredited master's degree in military operational art and science. The program was reviewed by a joint staff accreditation team and received initial JPME Phase I certification in 2007 and full accreditation in 2009. More importantly, students can participate in a learning opportunity that is focused directly upon the needs of the modern war fighter—gaining knowledge and developing skills that will serve them in their current positions, throughout the remainder of their military careers, and once they leave the military.

Learning Outcomes. ACSC's OLMP builds upon the knowledge and skills imparted in BDE and experience gained as a company grade officer, delivering educated mid-to-senior-level captains and field-grade officers (FGO) prepared to develop, employ, and command air, space, and cyberspace power in joint, multinational, and interagency operations. ACSC's OLMP delivers relevant student-centered educational experiences globally, meeting the unique demands of expeditionary Airmen. The OLMP produces FGOs who

- are capable command and staff leaders who understand operational and strategic leadership in a joint, whole-of-government, and multinational context;
- possess well-developed analytic capabilities and creative/innovative thought processes;

- are well grounded in military history, theory, and doctrine across the range of military operations;
- comprehend the US national strategic decision-making process and how the actors and systems translate policy into action through the instruments of power;
- comprehend regional expertise and cultural competence as war-fighting enablers;
- communicate effectively by providing succinct, comprehensive, and accurate accounts of operational-level issues; and
- are well versed in joint and service perspectives and understand joint planning and operations within the context of operational art across the range of military operations (joint warfare concentration).

Faculty. The college employs a blend of expert faculty members exceptionally qualified to accomplish its mission and goals. The college's unique mission requires a distinctive mix of faculty qualifications and credentials. Traditional civilian academics provide the depth and breadth of subject matter expertise to guarantee the academic rigor of the college's offerings while simultaneously ensuring adherence to validated pedagogical theory and practice. Military officers contribute critical military and operational perspectives, as well as unparalleled currency and expertise, to the subject matters addressed.

Duration. The academic program consists of 11 eight-week courses (seven core courses and four concentration courses) for a total of 33 semester hours of credit. Students have up to five years from the start date of their first course to complete the program. Although the typical student can complete the program in about two years, the program's rigor requires a significant time commitment to meet that goal.

Eligibility–Joint Warfare Concentration

- Military: Eligible personnel include O-4 selects and O-4s on active duty or in the AFR or ANG. Individuals with either a master's degree or who have completed IDE—to include

ACSC—may apply. Individuals who have previously completed both a master's degree and IDE are ineligible.

- Civilians: Air Force civilians in grades GS-12 and above, or NSPS Pay Band 2 and above, may be competitively selected to enroll in the program. Air Force civilians should contact their local civilian personnel office if interested in consideration.

Eligibility–Leadership Concentration

- Military: Eligible personnel include USAF active duty O-3s who have total active federal commissioned service between six to seven years and have completed SOS, but do not have a master's degree.
- Civilians: Civilians currently are ineligible for the Leadership concentration.

Admission Requirements.

- Military: Students can access enrollment information through the Air University Portal. Before applying, students must ensure military records accurately reflect their current educational level. Refer to the Air Force Personnel Center Web site, education and training link, to do so. Students must confirm that the education data accurately reflects all degrees earned. If it does not, contact AFIT/RRC (DSN 785-6234) to update this information.
- Civilians: Applicants must scan and e-mail a completed AF Form 4059, Air Force Civilian Competitive Development Nomination, to the AFPC/DPIF Leadership Development group box (can be found in the global). The AF 4059 must be signed by your first-level supervisor, and the endorser signature should be your second-level supervisor, although the signature level should not exceed the GS-15/colonel level. If your second level is higher than a GS-15/colonel, have your first-level supervisor endorse it.

If selected to attend, you will be notified by AFPC/DPIFA with instructions for submitting your application. If you have any questions, please contact AFPC/DPIFA at DSN 665-2524 (210-565-2524) or contact your functional Career Field Team (CFT).

Graduation Requirements. Students fully admitted must complete the 33-semester-hour program and must achieve a grade of “C” or higher on each academic course with an overall grade point average of 3.00 on a 4.00 scale and successfully complete Student Orientation to earn the master of military operational art and science degree.

Joint Warfare Curriculum Summary

Course Number and Title	Semester Hours
OC5510 Orientation Course	Noncredit
LW5510 Leadership and Warfare	3
AP5510 Air, Space, and Cyberspace Power Studies	3
NS5510 International Security Studies	3
WS5510 Warfare Studies	3
CS5510 Regional/Cultural Studies	3
RE5610 Research and Electives I	3
RE5611 Research and Electives II	3
LC 5510 Practice of Command	3
JP5510 Joint Forces	3
JA5510 Joint Air and Space Operations	3
JF5510 Joint Planning	3
Total	33

Leadership Concentration Summary

Course Number and Title	Semester Hours
OC5510 Orientation Course	Noncredit
LW5510 Leadership and Warfare	3
AP5510 Air, Space, and Cyberspace Power Studies	3
NS5510 International Security Studies	3
WS5510 Warfare Studies	3
CS5510 Regional/Cultural Studies	3
RE5610 Research and Electives I	3
RE5611 Research and Electives II	3
EL5301 Expeditionary Leadership in Intercultural Environments	3
FO5301 Foundations of Officership	3
OL5301 Organizational Leadership	3
TL5301 Team Building Leadership	3
Total	33

Course Descriptions

OC 5510 Orientation Course

Noncredit

The Orientation course provides an overview of the entire online master's degree program—including US Air Force educational methodologies, policies, curriculum, research requirements—and key principles and concepts that students will encounter throughout their academic experience. The course includes an introduction to small-group dynamics, communication and critical-thinking skills, the technology employed within the program, student responsibilities and requirements, and additional services that are available to enhance student success.

LW 5510 Leadership and Warfare

3 semester hours

The Leadership and Warfare course analyzes factors that guide military leaders' actions in establishing and maintaining an effective leadership environment. The course also seeks to educate and inspire students to reach their full leadership potential by studying great commanders and their conduct of warfare and current problems of command in contemporary joint operations. Through these studies, students gain a unique understanding of the specific leadership challenges that leaders face in guiding people and organizations through crises and environments of change.

AP 5510 Air, Space, and Cyberspace

Power Studies

3 semester hours

The Air, Space, and Cyberspace Power Studies course enhances students' understanding of military theory by introducing perspectives on war fighting with specific emphasis on air, space, and cyberspace power. It looks specifically at the development of air, space, and cyberspace power and examines the organizations and strategies that have been involved in their employment. In addition, the course analyzes the role these elements might play in future operations.

**NS 5510 International Security
Studies**

3 semester hours

The International Security Studies course provides a foundation for understanding the international security environment, its implications for the United States, and how the United States both shapes and responds to this environment. The course also examines the instruments of power (IOP) and how these are wielded by both state and nonstate actors to affect the international environment. In addition, the course examines the US national strategic decision-making process, examining how the actors and systems translate policy into action through the use of the IOPs.

WS 5510 Warfare Studies

3 semester hours

The Warfare Studies course introduces students to the canon of military theory, focusing on such issues as the nature of war, the levels of war, the range of military operations, military strategy, and operational art. It looks specifically at traditional forms of warfare but also examines such alternative forms as guerilla warfare, insurgency, counterinsurgency, and other forms of warfare. Through this study, students apply the lessons of military theory and their understanding of warfare to operational challenges facing both today's and tomorrow's US military.

CS 5510 Regional/Cultural Studies

3 semester hours

The Regional/Cultural Studies course introduces students to regional and cultural factors and discusses how these factors motivate actors within the international security environment. Through this course, students grasp the important role of culture in determining operational success. Students are also exposed to the unique ways in which their own cultural perspectives influence both their outlook and interaction with other societies. Through this experience, students come to understand the unique security challenges and opportunities posed by culture and how best to respond to ensure success.

RE 5610 Research/Electives I**3 semester hours**

The Research Electives I course complements ACSC's core curriculum, providing an opportunity for students to begin investigating topics of particular interest in a rigorous fashion under the direction and guidance of a subject matter expert. Through this program, students develop their ability to define an issue succinctly; conduct thoughtful, logical, and critical research and analysis; and create well-supported research proposals that will serve as the intellectual basis for the scholarly research papers produced in Research Electives II.

RE 5611 Research/Electives II**3 semester hours**

The Research Electives II course complements ACSC's core curriculum, providing an opportunity for students to complete investigating topics of particular interest in a rigorous fashion under the direction and guidance of a subject matter expert. Through this program, students refine their ability to define an issue succinctly; complete thoughtful, logical, and critical research and analysis; and synthesize well-supported conclusions and recommendations that serve as the foundation for a scholarly research paper of potential benefit to today's war fighters. Research Electives I (RE 5610) is a prerequisite for this course.

LC 5510 Practice of Command**3 semester hours**

The Practice of Command course provides an opportunity for students to reflect on their personal philosophy on the art and craft of command, honing that philosophy through interaction and the study of responsibilities and challenges unique to commanding an Air Force squadron. The course introduces students to the resources available to assist squadron commanders with their duties and stresses how important it is for commanders to meld their personal philosophies on command with the unique requirements of their situation and their responsibilities to service, mission, people, and themselves.

JF 5510 Joint Forces**3 semester hours**

The Joint Forces course presents the joint and service doctrinal perspectives that guide joint force commanders and their staffs as they seek to achieve assigned theater security objectives. The course provides an overview of joint force organizational structures and the framework within which joint forces are created, employed, and sustained. It also examines each of the military services, exploring their capabilities and limitations. In addition, the course analyzes the ways in which joint force commanders integrate service and functional component command support to achieve success at the operational level of war.

JP 5510 Joint Planning**3 semester hours**

The Joint Planning course introduces students to the complexities and requirements of joint planning. Through the course, students will study pertinent doctrine and the joint operation planning process, analyze the challenges joint force commanders face in attaining unified action, and examine ways in which operational art and design are applied to achieve objectives. Additionally, students examine planning considerations across the range of military operations. The course culminates with students synthesizing what they have learned to create key elements of a campaign plan. This course is a prerequisite to the Joint Air and Space Operations (JA 5510) course.

**JA 5510 Joint Air and
Space Operations****3 semester hours**

The Joint Air and Space Operations course introduces students to the people, processes, and products involved in planning, directing, and executing joint air operations in support of joint force commanders' campaign plans. The course focuses specifically on the importance of the JFACC, looking at the doctrinal responsibilities of that position and the actors, processes, and products that comprise the JFACC's air operations center. Equipped with this understanding, students analyze the employment of air and space power across the full range of military operations. Joint Planning (JP 5510) is a prerequisite for this course.

**EL 5301 Expeditionary Leadership
in Intercultural Environments**

3 semester hours

The Expeditionary Leadership in Intercultural Environments course provides an understanding of regional factors that affect national foreign policy and explores global, regional, and cultural issues associated with participating in joint and coalition operations. It stresses the importance of cultural awareness and intercultural competence when dealing with the peoples of regions likely to require US military assistance. The course also examines deployment-specific leadership issues focusing on warrior ethos, including mental and physical preparation, military bearing, and self-discipline.

FO 5301 Foundations of Officership

3 semester hours

The Foundations of Officership course addresses follower-ship, regarded as a critical element of leadership and officership, followed by an examination of skills related to effective spoken and written communication in the context of the twenty-first-century Air Force. Through this course, students develop broad perspectives of current issues and associated tools aimed at enhancing professional competence beyond individual specialties; increase their value to their units by understanding and being able to apply interoperability; develop skills necessary to lead, follow, and manage; and become better wingmen who care for peers and subordinates alike.

OL 5301 Organizational Leadership

3 semester hours

The Organizational Leadership course is designed to develop officer organizational and management skills to better support and lead change in complex institutional structures. The course focuses on basic organizational theory and communications, change management, strategies for continuous improvement, and resource stewardship. It enhances officers' ability to deal with the financial, informational, technological, and human resource issues that may affect mission capabilities, while utilizing appropriate methods to identify opportunities, implement viable solutions, and measure the impact of outcomes. Further, this course advocates a commitment to

continuous improvement—necessary to ameliorate processes, products, and people—while meeting the needs of internal and external stakeholders to accomplish Air Force mission requirements efficiently.

TL 5301 Team Building Leadership 3 semester hours

The Team Building Leadership course examines command from the perspective of officers in formal leadership billets. The course explores building leaders, motivation, force development, mentoring, organizational design and decision making, power and authority, morality and ethics, leading change, organizational culture, and communication. It examines the composition, function, and purpose of the flight in the context of the roles, responsibilities, knowledge, skills, and attitudes expected of officers in leadership positions. Academic content and practical examples are integrated with activities from operational fields to leverage officers' education, training, and experience to equip them with new or enhanced skill sets, including the ability to inspire, develop, and take care of diverse groups of individuals while leading them to mission success.

**School of Advanced
Air and Space Studies**

**Master of Airpower Art and Science
and Certificate Program**

Internet Address

<http://www.au.af.mil/au/saass/>

Mission. *Educate strategists for the Air Force and the nation.*

A revolution in AF PME began in the late 1970s. As the revolution continued in the 1980s, it led Air Force chief of staff Gen Larry D. Welch to charter a new graduate school, the School of Advanced Airpower Studies (SAAS), at Air University

in 1988. The first class convened in the summer of 1991 and graduated in June 1992. Beginning with the graduation of the first class, SAAS has produced many of USAF's most influential and innovative strategists and leaders. In November 2002 SAAS was redesignated the School of Advanced Air and Space Studies (SAASS).

Curriculum. The SAASS curriculum is an intensive 50-week program. The primary instructional forum is the graduate colloquium, which facilitates maximum interaction between students and the expert faculty. Class size is limited to 45 AF officers, five joint-service officers from the Army, Navy, and Marines; three officers from the Air Reserve Component; and several officers from closely allied nations upon invitation from the chief of staff, United States Air Force. Total enrollment will not exceed 60 students. SAASS creates warrior-scholars who have a superior ability to develop, evaluate, and employ airpower as a component of military force in support of state objectives. Upon completion of all requirements and with faculty recommendation, graduates receive a master of airpower art and science degree.

Learning Outcomes. The SAASS curriculum is designed to accomplish two major objectives.

- Enhance the student's ability to *think critically* about the relationship of military force to statecraft resulting from
 - a thorough evaluation of military and airpower theories and
 - a thorough evaluation of the reality of military experience, resulting in a reasoned synthesis of theory and experience, the articulation of which informs the question of how modern military force and its airpower component can best be applied across the spectrum of conflict.
- Enhance the student's ability to *argue effectively and responsibly* about military strategy using evidence and logic resulting from experience in introducing and defending propositions in a graduate colloquium environment, com-

posing interpretive arguments in prose that meet accepted publication standards, and reducing complex formal arguments to comprehensible briefings.

Faculty. SAASS faculty members hold a doctorate or equivalent in their fields of academic expertise. The breadth, depth, and diversity of their expertise are enhanced by the fact that the SAASS faculty is divided between terminally credentialed field-grade or senior officers and civilian scholars.

Duration. SAASS is an 11-month follow-on school for selected graduates of intermediate-level DOD PME schools.

Eligibility. SAASS students are chosen by a central selection board at the Air Force Personnel Center (AFPC). To apply for consideration, officers must have completed or be in attendance at an intermediate developmental education program in residence.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA Course number: SAASS000.

Admission Requirements. Admission to SAASS is highly competitive. Applicants must write an essay on a subject selected by the commandant. They also must have either a master's degree from an accredited institution or a bachelor's degree with an overall grade point average of 3.25 or higher on a 4.0 point scale. AFIT verifies academic qualifications for applicants attending nondegree-granting intermediate residence programs. A central selection board convened at AFPC makes the final admission selections among qualified applicants.

International students must be native English speakers or score in the 95th percentile on the Test of English as a Foreign Language (TOEFL) within the three years before entering SAASS. Nonnative English speakers must have attended an English-speaking resident intermediate developmental education program, preferably ACSC, including the IOS prep course. Those entering without having attended ACSC must have attended an English-speaking intermediate program in residence but will have to forego the prep course due to conflicts with the

SAASS course schedule. International students should possess undergraduate or graduate degree qualifications equivalent to those required of US students.

Graduation Requirements.

To receive a degree, a student must

- achieve a weighted grade point average for all letter-graded courses of 3.0 or higher;
- achieve a “pass” grade for all courses graded “pass/fail”;
- prepare a thesis based on research in original source materials that meets generally accepted standards of research, analysis, and expression at the master’s degree level; and
- complete an oral comprehensive examination conducted by a faculty board with a grade of “B” or higher.

To receive a certificate, a student must

- achieve a weighted grade point average for all letter-graded courses of 2.5 or higher;
- achieve a “pass” grade in all courses graded “pass/fail”;
- prepare a thesis based on research in original source materials that meets generally accepted standards of research, analysis, and expression for Air Force staff work; and
- complete an oral comprehensive examination conducted by a faculty board with a grade of “B-” or higher.

Curriculum Summary
(Not listed in order of presentation)

SAASS000 Course Numbers and Titles	Semester Hours
SAASS 600 Foundations of Military Theory	4
SAASS 601 Foundations of Strategy	3
SAASS 627 History of Airpower I	4
SAASS 628 History of Airpower II	4
SAASS 632 Coercion and National Security	3
SAASS 643 Strategy and Campaign Planning	3
SAASS 644 Irregular Warfare and Terrorism	3
SAASS 660 Technology and Military Innovation	3
SAASS 665 Space Power	3
SAASS 667 Information and Cyber Power	3
SAASS 670 Contemporary Defense Policy	3
SAASS 690 Thesis	7
SAASS 699 Comprehensive Examination	3
Total	46

Course Descriptions

**SAASS 600 Foundations of
Military Theory**

4 semester hours

This course analyzes the writings of military theorists who significantly influenced thought about the art and science of war. Through this analysis, students gain a broad background in the development of military thought and develop critical thinking skills as they test theoretical propositions against the criteria of logic and evidence.

SAASS 601 Foundations of Strategy 3 semester hours

This is a “tools” course that provides a background and an understanding of decision-making theories and strategy. These tools allow the student to better analyze airpower theories, ideas, issues, and concepts. Defense planning issues are discussed to illustrate decision-making challenges and issues pertinent to future airpower strategists.

SAASS 627 History of Airpower I 4 semester hours

This course examines the historical development of air and space power in terms of organization, technology, doctrine, and application. It provides an experiential database required for students to evaluate the theory and practice of airpower. Theories of Douhet, Trenchard, Mitchell, de Seversky, Slessor, and others are detailed. The transition point to the second course in the sequence (History of Airpower II) is governed by the staff ride, a field trip to the locations where the historical events occurred. For this year the staff ride will explore airpower in France surrounding the Normandy invasion during World War II. The staff ride will also include a visit to the Verdun battlefield of World War I, which many consider to be the cradle of modern airpower. Hence, the history sequence will break with the end of World War II.

SAASS 628 History of Airpower II 4 semester hours

This course analyzes the development of air and space power theory and history from the end of World War II to the present. It examines the theories of John Warden and others as well as effects-based operations and compares them with the practice of airpower over the past 60 years. The coercion theories of SAASS 632 also undergo the practical scrutiny of historical experience.

SAASS 632 Coercion and National Security 3 semester hours

This course analyzes modern theory and contemporary thought regarding strategic deterrence and coercion; crisis stability; strategic nuclear offense, defense, and proliferation; conventional strategic air attack; force projection; and the adaptation of US grand strategy to changes in the international distribution of power, focusing on the use of airpower to pursue and support these national security objectives.

SAASS 643 Strategy and Campaign Planning**3 semester hours**

This course examines the substance and process for making strategy and applies this information to a real-world situation through a war game. The military decision-making process receives a thorough review, as does the process of formulating commander's intent and translating that to a campaign plan. The unique approach to campaign planning taken by the different services receives treatment. The joint war game includes participants from other advanced study groups—Army, Navy, and Marine. The course includes seminar sessions with Air Force senior mentors to clarify concepts in the context of current planning and operations.

SAASS 644 Irregular Warfare and Terrorism**3 semester hours**

This course develops the theory of small wars and examines the use of airpower in nonstate warfare with a particular emphasis on revolutionary and counterrevolutionary insurgent warfare. The phenomenon of terrorism and the “global Salafist jihad” of radical Islam also receive treatment.

SAASS 660 Technology and Military Innovation**3 semester hours**

This course focuses on the theory and history of technological development and its impact on innovation in military affairs. The course attempts to develop habits of mind and patterns of inquiry that inform successful military innovation. Theories of technological determinism, social construction, and heterogeneous engineering form the basis of inquiry.

SAASS 665 Space Power**3 semester hours**

This course examines the development of military space operations, organizations, strategy, and policy. It explores the contentious issues surrounding space in modern warfare and deals explicitly with weaponization and the organization of space forces in the Department of Defense.

**SAASS 667 Information and
Cyber Power**

3 semester hours

This course defines the cyber domain and explores networks, intelligence, influence operations, and the paramount role of information in modern warfare. The history of computers and network development as well as the implications for terrorism receive treatment.

**SAASS 670 Contemporary
Defense Policy**

3 semester hours

This course focuses on the main actors in the defense arena, from the president to the Congress, secretary of defense, and individual service cultures. It examines topical areas of current and potential US defense concerns and surveys geographic regions likely to present issues in the near future.

SAASS 690 Thesis

7 semester hours

The students develop and present to the faculty a research proposal. Once their proposal is approved, the students, with the advice and assistance of a faculty research advisor, prepare a 50- to 100-page thesis based on primary sources. In writing their theses, the students must demonstrate sound scholarship and conform to generally accepted stylistic and methodological canons.

**SAASS 699 Comprehensive
Examination**

3 semester hours

A two-hour oral examination by a board of three faculty members (one of whom is usually from outside the SAASS faculty) is designed to determine if the student has satisfactorily synthesized the entire SAASS curriculum. The interrelationship among courses and the embedded material is often a prominent feature of the examination.

USAF Test Pilot School

Master of Science in Flight Test Engineering

Internet Address

<http://www.edwards.af.mil/library/factsheets/factsheet.asp?id=6467>

Mission. *Produce highly adaptive, critical-thinking flight-test professionals to lead and conduct full-spectrum test and evaluation of aerospace weapon systems.*

Established in 1944 at Wright Field, the Test Pilot School (TPS) has always been known for producing high-quality flight testers and engineers. In 1951 the school was moved to Edwards AFB, California. In 1961 the Aerospace Research Course was added, and the school was renamed the USAF Aerospace Research Pilot School (ARPS). In 1972 the ARPS course was terminated, and the systems phase was added. This is when the school officially became the USAF Test Pilot School. Due to the sophistication of aircraft, as turbojets became more prevalent in the Air Force, the flight test engineering (FTE) program was initiated in 1973, and the flight test navigator (FTN) program was initiated in 1973. This development created three curricula for TPS students: flight test pilot, FTN, and FTE. In 1990 a test management project (TMP) was added to facilitate the understanding of the full-flight-test process. In this TMP, TPS students work in groups to create a test package, execute the test, and present the results to the TPS faculty. The school also offers a number of short courses to support various levels of test and evaluation education.

There are 2,468 TPS graduates, including 109+ general officers. Sixty-two of the current 272 National Aeronautics and Space Administration astronauts graduated from TPS. There have been 75 civilian and 39 female graduates, including astronaut Eileen Collins, as well as 310 international graduates from 24 different countries.

On 21 January 2009 the president of the Southern Association of Colleges and Schools approved the awarding of a master's degree in flight test engineering to those students enrolled in the program from April 2007 onward.

Curriculum. A typical day at TPS includes a combination of flying and academics. For the academics portion, there are four main subdisciplines taught by the USAF TPS Education Division: Performance, Flying Qualities, Systems, and Test Management. To assist students in their studies, TPS issues to students 15 loose-leaf textbooks and 10 bound and stamped textbooks for their personal libraries. Students also receive a notebook computer and accessories for use during the course. The USAF TPS portal is the online access point for students and staff for the entire curriculum taught at TPS. Housed on the portal are the most current slides for lectures, flight cards, virtual drop boxes for reports, and many other resources.

Learning Outcomes. Graduates of TPS should have a thorough grounding in the following core competencies:

- Diverse aerospace vehicle exposure. The graduate will have flown different types of aerospace vehicles and flown/monitored various operational tasks to ensure a solid fundamental understanding of a broad range of military missions using rapid adaptability or unfamiliar aerospace vehicles and systems.
- Flight test engineering. The graduate will have sufficient math, science, and engineering skills to evaluate aerospace vehicle, system, and munitions design and apply academic theory, flight-test techniques, and modeling and simulation to successfully determine specification compliance and military utility of the system under test.
- Flight test techniques (FTT). The graduate will be able to select, develop, understand, and execute the appropriate FTT to achieve a test objective.
- Flight test planning. The graduate will be able to comprehend and apply the test-management process to effectively plan and execute a flight test to include how to access and efficiently allocate test resources.
- Safety planning and risk management. The graduate will be able to consistently apply a test-safety process for iden-

tifying test-unique hazards and developing procedures to mitigate risk.

- Flight test execution. The graduate will be able to safely, effectively, and efficiently conduct a mission as part of a test team either on board the aircraft or in the control room.
- Data management. The graduate will be able to collect and analyze the data required to determine if an airplane or system meets mission requirements and/or specifications and the type, quantity, accuracy, and precision of the data required; how the data is to be collected and used; and the type of data analysis to be used.
- Flight test evaluation. The graduate will be able to apply knowledge and skills gained through critical thinking by analyzing, synthesizing, and evaluating test results to reach substantiated conclusions and recommendations.
- Flight test reporting. The graduate will be able to effectively communicate in written, oral, and graphical form to clearly document test and safety planning, test accomplishments and deficiencies, and assess the mission impact of this data.
- Integrated test teaming. The graduate will have an understanding of the acquisition life cycle and where test and evaluation (T&E) fits into the process; how to apply governing regulations, directives, and requirements for developing a test program; and how to build an integrated, multi-disciplinary test team of development and operational personnel from the military, government, and contractors.

Faculty. TPS faculty members hold a master's degree, a doctorate, or an equivalent degree in their fields of academic expertise. The breadth, depth, and diversity of their expertise are enhanced by the fact that the faculty includes terminally credentialed field-grade or senior officers and civilian scholars.

Duration. Two classes each year; 48 weeks each.

Eligibility. The following are the current requirements for TPS eligibility.

Curricula	Time in Service (at class entry)	Education	Experience (at class entry)	Physical Qualification	Clearance
Experimental Test Pilot	Active: total active federal commission service (TAFCS) (Guard and Reserve: total commission service to date [TFCS]) Fewer than 9 years and 6 months (10 years and 3 months for helo pilots)	BS in engineering, mathematics, or physics. Minimum grade point average (GPA) of 2.5 on a 4.0 scale.	Pilots on extended active duty (EAD) and not in suspended flying status. Pilots must have served at least 12 months as an aircraft commander in a manned major weapon system. Pilots must be qualified instructor pilots (minimum 50 hours instructor time) in a major weapon system or have at least 750 hours total time (150 hours may be unmanned aircraft system [UAS] time).	Annual Flying Class II	Secret
Experimental Test Combat Systems Officer/UAS Pilot	Fewer than 10 years and 3 months	Same as above	<p>Combat Systems Officers (CSO): Must be qualified instructor CSOs in a major weapon system (minimum 50 hours instructor time) or have at least 500 hours total time in a major weapon system. (Total time excludes student time and unmanned aerial system time.)</p> <p>UAS Pilots: Must be qualified instructors (minimum 50 hours instructor time) or have at least 500 hours total time.</p>	Annual Flying Class II	Secret
Experimental Flight Test Engineer	Active: TAFCS (Guard and Reserve: TFCS) Fewer than 8 years	Degree requirements same as above. Technical master's degree is highly desired	On EAD with a minimum of 2 years of experience in one of the following Air Force specialty codes: 13XX, 14NX, 21AX, 21CX, 21LX, 21MX, 33SX, 61SX, 62EX, or 63AX (Civilians: minimum 2 years experience in T&E) FAA flying certifications or military flying is highly desired.	Annual Flying Class III	Secret

NOTE: The term *combat systems officer* includes rated navigators, electronic warfare officers, and weapon system operators.

Admission Requirements. Admission into the USAF TPS is extremely competitive. In addition to Air Force personnel, civilian, Navy, Marine Corps, and allied nation personnel are encouraged to apply for these programs. Refer to AFI 99-107, *Test Pilot School*, for application details.

Graduation Requirements. The USAF TPS curriculum is designed to grant a master of science in flight test engineering at the end of a 48-week course. Students are required to take the 13 offered courses to graduate. This is a total of 50 credit hours for the 48-week course. Each of the four phases consists of three or four main lecture courses. These courses are accompanied by the allocated laboratories or simulator work and flight courses. A student must be in good standing and satisfactorily complete all academic tests, oral and written reports, and curriculum flying missions and complete the comprehensive written and oral evaluations. Students must achieve a grade of “C” or higher on each academic course with an overall GPA ≥ 3.0 .

Curriculum Summary

Course Number and Title	Semester Hours
PF 5416 Fixed-Wing Aerodynamics	3
PF 5417 Performance Data Standardization	3
PF 5418 Performance Optimization	3
FQ 5426 Unaugmented Airplane Motion	4
FQ 5427 Flight Control Systems Testing	4
FQ 5428 Stall, Departure, and Spin Failure State Test	4
FQ 5429 Handling Qualities and Envelope Expansion Testing	4
SY 5436 Human Factors and Avionics	3
SY 5437 Airborne Sensors	3
SY 5438 Weapons and Integrated Systems Evaluations	3
TM 5446 Test Planning and Reporting	4
TM 5449 Test Management Project and Comprehensive Exams	9
QE 5459 Single-Look Qualitative Evaluation Program	3
Total	50

Course Descriptions

PF 5416 Fixed-Wing Aerodynamics 3 Semester Hours

This course contains academic theory lectures for introduction to aerodynamics, compressible aerodynamics, and cruise performance. This theory is the basis of flight and aerodynamics for fixed-wing aircraft. The flight-test techniques included in this course are mission director, aerodynamic modeling, cruise data, fighter performance check ride, and high- and low-lift over drag ratio.

PF 5417 Performance Data Standardization 3 Semester Hours

This course consists of pilot statistics, modeling and simulation, and propulsion. These courses form the basis for atmosphere-measuring devices on aircraft and different thrust-generating devices for aircraft. The flight-test techniques for this course consist of tower flyby, pacer/global positioning system (GPS), and the propulsion demonstration.

PF 5418 Performance Optimization 3 Semester Hours

This course consists of takeoff, landing, and energy. These areas demonstrate the equations needed for normal flight and departure from flight. The flight-test techniques for this course consist of takeoff and landing, C-12 level accelerated turn, level accelerated sawtooth climb, turn performance, and multiengine performance final check ride.

FQ 5426 Unaugmented Airplane Motion 4 Semester Hours

This course consists of unaugmented equations of motion, trim, and stability. It provides a basic overview of the flying-qualities flight testing. The flight-test techniques for this course include C-12 longitudinal static stability/maneuvering flight demonstration, LJ-24 variable stability system (VSS) introduction and longitudinal demonstration, C-12 lateral-directional stability, LJ-24 VSS lateral-directional demonstration, and T-38 dynamics demonstration.

**FQ 5427 Flight Control
Systems Testing****4 Semester Hours**

This course consists of introduction to flight control systems, parameter estimation, analog flight control systems, aero/servo/elasticity, criteria for flight control system design, frequency content, aliasing and filters, frequency response estimation, digital flight control systems, redundancy management systems, flight control systems ground testing, and flight test simulators. This course demonstrates the origins and history of flight control systems. The flight-test techniques include a variable-stability in-flight simulator test aircraft (VISTA) handling qualities demonstration. The lab test techniques for this course include the flight control system project and the flying qualities simulator.

**FQ 5428 Stall, Departure, and
Spin Failure State Test****4 Semester Hours**

This course consists of stall, departure, and spin failure state (engine-out) test. This course demonstrates the qualities and testing of an aircraft departing from normal, straight, and level flight. The flight-test techniques for this course consist of glider spin demonstration, T-38 stall demonstration, T-38 handling qualities demonstration, C-12 engine-out demonstration/data, KC-135 engine-out demonstration/data, F-16 departure demonstration, F-16 departure data, and T-38 departure chase.

**FQ 5429 Handling Qualifying and
Envelope Expansion Test****4 Semester Hours**

This course consists of an overview of flying qualities testing, configurations for flying qualities testing, taxi testing, first flight flying qualities testing, flying qualities envelope expansion testing, handling qualities evaluation, one-flight evaluations of flying qualities, stores certifications, and structures. It previews the types of flying accomplished during a typical test program. The flight-test techniques consist of F-16 limit cycle oscillation, multiengine flying qualities demonstration, KC-135 ground school, glider flying qualities demonstration, C-12 first flight check ride, F-16 handling qualities demonstration, F-15

check flight phase (CFP)/asymmetric stores demonstration, AT-38B CFP check ride, and F-16 structures check ride.

SY 5436 Human Factors and Avionics 3 Semester Hours

This course consists of the systems phase introduction, human factors, integrated navigation systems, communications and data-link systems, avionics systems integrations (ASI), and unmanned aircraft systems (UAS) lectures. It demonstrates different systems within the cockpit and how their design is tested. The flight-test techniques for this course include the F-15E systems demonstration. The lab-test techniques in this course consist of the avionics systems integration lab and the integration facility for avionics systems testing (IFAST) lab. Also, within this course is the F-15E systems ground school.

SY 5437 Airborne Sensors 3 Semester Hours

This course consists of the electro-optics and the radar lectures. It demonstrates different sensor systems used in modern-day warfare. The flight-test techniques for this course consist of F-16C/D electro-optics and the F-16D (or VISTA) air-to-air systems evaluation. The lab-test techniques in this course consist of the electro-optics lab and the IFAST radar. Also, within this course is the F-16C/D electro-optics systems academics/ground school.

SY 5438 Weapons and Integrated System Evaluations 3 Semester Hours

This course consists of the electronic warfare lecture, the weapons-delivery-testing lecture, F-16C/D air-to-ground lecture, the smart weapons air-to-air lecture, the smart weapons air-to-ground lecture, and the weapons and tactics overview lecture. This course demonstrates different weapons systems and the test of their delivery for modern warfare. The flight-test techniques for this course consist of electronic combat testing, F-16 weapons delivery demonstration, and the F-16D systems evaluations check ride.

TM 5446 Test Planning and Reporting 4 Semester Hours

This course consists of the test management phase introduction, probability and statistics, test conduct, intermediate test and evaluation, test management, unit safety officer training, test article modification planning, design of experiments (DOE), all-weather testing, deficiency reports, and executive test and evaluation. This course not only demonstrates the proper planning and execution procedures for flight testing but also includes the TPS reports program, initial flight reports, technical report formatting, and the DOE project.

TM 5449 Test Management Project and Comprehensive Exams 9 Semester Hours

Test management projects are customer-funded flight-test projects performed by teams of four to six students with guidance from the TPS staff. The customer provides the research concept or the part that is to be flight tested and funds specialized support of major aircraft modifications. The USAF TPS provides the test aircraft, which are normally Air Force Flight Test Center assets. TPS also funds minor aircraft modifications and the cost for flight hours of testing and evaluations. Using flight-test data, TPS students reduce the data, conduct data analysis, and provide a Defense Technical Information Center-ready technical report for the customer at the end of the process.

The comprehensive written test is a closed-book, four-hour exam. Each subdivision of the exam is allocated an hour, in which the master instructors can ask questions about any and all related material the students saw over their time at USAF TPS.

The comprehensive oral test is a panel examination of the individual students to ensure their comprehension of test principles and concepts. A panel of from four to five USAF TPS faculty presents the students with a possible test scenario. The students must then develop a test concept and defend it to the panel.

QE 5459 Single-Look Qualitative Evaluation Program 3 Semester Hours

As future flight testers, TPS students must graduate with a broad range of knowledge of flying and testing aircraft. An im-

portant part of the TPS curriculum is the qualitative evaluation program. Throughout the TPS course, students are given the opportunity to fly and test several types of aircraft. They learn to apply basic flight-test and data-collection techniques to investigate unique aircraft attributes in unfamiliar aircraft. The “final exam” for the qualitative evaluation program is the capstone qualitative evaluation. Students use their experience from previous qualitative evaluations for a more detailed investigation over one or two flights in an unfamiliar aircraft. Students select their own flight-test techniques based on what they learned at TPS to properly evaluate qualitative and quantitative flight-test data with respect to aircraft type and mission.

Additional Programs

Field Trip. Students visit other bases to perform qualitative evaluations on the F-15D Eagle, F-15E Strike Eagle, SH-60 Seahawk, F/A-18 Hornet, and other aircraft not available at Edwards AFB, CA. They also visit a foreign test center to perform qualitative evaluations on their available aircraft. Foreign test centers visited in the past were located at Empire TPS (Boscombe Down, United Kingdom), at the Ecole du Personnel Navigant d’Essai et de Reception/School (school for flight personnel) in France, and in Italy, Brazil, India, Germany, Spain, and Sweden.

Air Force Institute of Technology

Internet Address

<http://www.afit.edu>

Mission. *Provide defense-focused technical graduate and continuing education, research, and consultation for air, space, and cyberspace competence.*

The Air Force Institute of Technology (AFIT) is the Air Force’s graduate school of engineering and management as well as its institution for technical professional continuing education. A

component of Air University, AFIT is committed to providing defense-focused graduate and professional continuing education and research to sustain the technological supremacy of America's air and space forces. AFIT accomplishes its mission through three resident schools: the Graduate School of Engineering and Management, the School of Systems and Logistics, and the Civil Engineer and Services School. Through its civilian institution programs, AFIT also manages the educational programs of officers enrolled in civilian universities, research centers, hospitals, and industrial organizations. Since resident degrees were first granted in 1956, AFIT has awarded more than 16,000 master's and 350 doctoral degrees. In addition, Air Force students attending civilian institutions have earned more than 12,000 undergraduate and graduate degrees in the past 20 years.

The effects of AFIT's educational programs pervade the Air Force and Department of Defense. Graduates are assigned to a wide range of positions in a rapidly changing technological environment. They become both practicing engineers and broadly educated leaders. No matter what degree a student earns, AFIT's primary goal is to graduate mission-ready men and women who can positively impact the Air Force.

Accreditation. AFIT is separately accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools (NCACS), is a member of NCACS, and maintains its own official catalog. The NCACS can be contacted at the Higher Learning Commission, North Central Association of Colleges and Schools, 30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504, Phone: (800) 621-7400, Fax: (312) 263-7462.

In addition to institutional accreditation, the Accreditation Board for Engineering and Technology accredits selected programs within the Graduate School of Engineering and Management. Contact this agency at Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202, Phone: (410) 347-7700, Fax: (410) 625-2238.

AIR UNIVERSITY UNDERGRADUATE PROGRAMS

This section describes the Air University undergraduate degree programs. The Community College of the Air Force (CCAF) awards undergraduate credit for these courses toward an associate in applied science degree. These programs are designed as professional military education courses that focus on the profession of arms, warfare, leadership, international security, and communication.

Community College of the Air Force

Associate in Applied Science Degree

Internet Addresses

Public site: <http://www.au.af.mil/au/ccaf/>

Nonpublic site: <https://ccaf.maxwell.af.mil/>

Air Force Virtual Education Center:

<https://my.af.mil/afvecprod/>

Mission. *Offer and award job-related associate in applied science degrees and other academic credentials that enhance mission readiness, contribute to recruiting, assist in retention, and support the career transitions of Air Force enlisted members.*

The Community College of the Air Force (CCAF) serves the educational needs of the Air Force enlisted community by offering associate in applied science degrees and other credentialing programs that enhance mission readiness, contribute to recruiting, assist in retention, and support the career transitions of Air Force enlisted members. It is the only federally chartered institution in the United States that awards college degrees solely to USAF enlisted personnel.

The college was established in April 1972 at Randolph AFB, Texas; relocated to Maxwell AFB in April 1979; realigned under Air University in July 1993; and relocated to Maxwell-Gunter Annex in November 2008. The college mailed its first official transcript in November 1972 and issued its first career education certificate in August 1973.

The college received degree-granting authority in July 1976 and awarded its first associate in applied science degrees in April 1977. From 1980 to 2004 the college was separately accredited by the Commission on Colleges of SACS (1866 Southern Lane, Decatur, GA 30033-4097; telephone number [404] 679-4501) to award the associate degree.

With more than 325,000 registered students, the college is the largest multi-campus community college in the world. Its affiliated schools are located in 37 states and nine foreign locations. Nearly 5,800 CCAF faculty members provide quality instruction for the professional development of enlisted per-

sonnel. The college has awarded more than 350,000 associate in applied science degrees to enlisted members of the active duty Air Force, ANG, AFRES, and enlisted members of the Army, Navy, Marine Corps, and Coast Guard teaching in CCAF-affiliated schools.

Degree Program. CCAF awards an associate in applied science degree in five areas: Aircraft and Missile Maintenance, Allied Health, Electronics and Telecommunications, Logistics and Resources, and Public and Support Services.

The detailed listing and description of each CCAF degree program is available in the separate CCAF *General Catalog*, published every three years. The detailed listing and description of individual CCAF courses comprising degree programs are available at each of the 100 affiliated schools specifically teaching those courses. Similarly, the listing of CCAF's more than 4,900 qualified instructors and 900 student instructors is available at each school where instructors teach, or the list can be found in a central database located in the CCAF administrative center.

CCAF System. The college functions as a single institution with respect to credit documentation, records, and educational program management. The system is supported by the Air Force Recruiting Service, USAF Occupational Measurement Squadron, Airman Classification Squadron, and Headquarters AETC. These agencies provide the recruitment, job analysis, and staff support required for successful operation of the system.

Affiliated Schools. The instructional programs of the college are conducted by the Air Force in traditional learning environments. Even when advanced instructional technology and individualized instruction are used, students attend regularly scheduled classes and complete specified course work under assigned faculty in much the same manner as students in the classrooms of most traditional civilian colleges, except that students typically attend one course at a time, eight hours each day, five days a week until satisfactorily completing the course.

What is often perceived as nontraditional about the college is its form of organization and administration. Air Force schools provide instruction at numerous locations because of the geo-

graphic mobility of the students as they pursue their Air Force occupations. Accordingly, each of these separate education and training organizations, called affiliated schools, is a component of a worldwide educational system.

Education and Training Section. The general education component of every degree program must be completed in civilian colleges and/or through nationally recognized testing programs, during off-duty time, with the Air Force paying all or some of the tuition costs. Counseling of students is accomplished by trained education counselors located on all major Air Force installations and CCAF advisors at each ANG and Air Force Reserve Command (AFRC) installation.

The education and training sections administer the College-Level Examination Program, Defense Activity for Nontraditional Education Support Subject standardized tests, and Excelsior College Examinations. They also conduct formal graduations worldwide at least once each year, usually during April or October.

Transcript Requests (CCAF). Students can order their free transcripts online through the CCAF Web site at <http://www.au.af.mil/au/ccaf/transcripts.asp>. To ensure compliance with the Family Educational Rights and Privacy Act, students may order only their own transcripts.

Enlisted Professional Military Education Instructor Course

Internet Address

<http://www.au.af.mil/au/barnes/>

Mission. *As the gateway to enlisted professional military education, the Instructor Course empowers graduates to develop future enlisted leaders equipped for twenty-first-century tactical, operational, and strategic levels of military engagement needed to develop, employ and support air, space, and cyberspace at all levels.*

The Enlisted Professional Military Education Instructor Course (EPMEIC) was established after the stand-down of Air University's Academic Instructor School (AIS). The EPMEIC satisfies the requirements of the Air Force for enlisted instructors who can teach in diverse educational environments using state-of-the-art educational skills and technologies. The school provides AF enlisted PME instructors with student-centered learning experiences through a supervised practice of carefully defined methods of instruction. The course is required to satisfy the requirements set by SACS for accrediting instructors who teach in CCAF-affiliated courses.

Curriculum. The EPMEIC is CCAF-affiliated and consists of 160 hours in-residence classes. Each student earns 10 hours of undergraduate credit upon completion of the course.

This course prepares graduates to instruct in EPME schools and academies. It is a rigorous, comprehensive, and fast-paced, experiential course that requires extensive reading, writing, and moderate research. Major curricular areas include learning theory, communication skills, instructional design, teaching methods, and evaluation. The course provides maximum participation in learning. The majority of class time is devoted to small-group activity. Students write level-of-learning objectives, develop rating scales, and create test items. Students must write well and create test items using interactive methods and master-selected academic content areas. The instructional methods include informal lecture, guided discussion, case study, experiential teaching interview, and demonstration-performance. Students develop the critical thinking skills involved in teaching interactive lessons as well as an understanding of the dynamics of learning styles and classroom management.

Learning Outcome. Develop unrivaled EPME instructors skilled in interactive teaching methodologies who have a broad understanding of educational activities as described in the Air Force Instructional systems development process.

Faculty. EPMEIC faculty must have an associate's degree (or fall within one year of completion) and complete the EPMEIC before assignment to EPME instructor positions. EPMEIC fac-

ulty must be 1750-series civilians or military, preferably with prior EPME instructor experience.

Duration. The EPMEIC is delivered in 20 academic days.

Eligibility. Air Force personnel must be selected through an application process to teach enlisted PME schools. Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA Course number: MESC003.

Curriculum Summary

Instructional Areas	Contact Hours
Administrative	6
Educational Foundations	26
Communication Skills	6
Methods	79
Evaluation	18
Instructional Design	17
EPME Specific	8
Total	160

Instructional Area Descriptions

Administrative 6 Contact Hours

The administrative block introduces students to the faculty with whom they will interact. They are informed of the local conditions and safety and security concerns. The staff gathers information for registrar and survey purposes. Structured activity creates a focus on developing teaching skills with emphasis on affective aspects of teaching. This block provides time to conduct graduation and facilitate return of supplies and equipment.

Educational Foundations 26 Contact Hours

Students learn the principles of teaching adults. Adult learning techniques are introduced. Since adult learners exhibit a wide range of learning styles, the exploration of learning styles,

personality types, and cognitive processes is conducted in this area and adds valuable insight. The faculty emphasizes and demonstrates use of preventive techniques that can anticipate numerous problems in the classroom.

Communication Skills

6 Contact Hours

The communication skills block provides the delivery principles necessary to effectively convey educational information and to promote student learning. This block focuses on the structure, organization, and support needed to prepare and to teach lessons efficaciously. Emphasis is placed on proper questioning techniques that are critical for interactive, experiential methods of instruction.

Methods

79 Contact Hours

Students learn several interactive, experiential methodologies and must teach the lessons they create. The practice teaching (PT) portion of this block permits students to experience real-world classroom dynamics in a safe laboratory environment. Students receive feedback on all PTs and lesson plans. They also experience the impact that well-developed lesson plans have on teaching and the criticality of effective questioning in interactive classrooms.

Evaluation

18 Contact Hours

The evaluation block offers a broad overview of the evaluation process so common in education. Students are shown the relationship of feedback to improving student performance and to gauging the effectiveness of the courses. In their seminars, students create rating instruments and use them to evaluate and critique their peers. They construct and analyze multiple-choice test items. The EPMEIC faculty models techniques appropriate for classroom feedback, critiquing, and testing.

Instructional Design

17 Contact Hours

The instructional design block is mandated by HQ Air Force and covers the ISD model that is the centerpiece of Air Force education. Other blocks in the EPMEIC reflect the phases and

functions found in the ISD model. Such activities as lesson planning and practice teaching illustrate the dynamics of this systems model. Students must learn the ISD process and practice it through various interactive, experiential activities.

EPME Specific

8 Contact Hours

The EPME specific block provides the students the opportunity to network with key members of the Barnes Center community and representatives of agencies unique to the Barnes Center. The information provided by the professionals in this block adds to the commitment of the students to EPME programs and enables them to articulate to their EPME students the importance of their chosen profession and its value to them and their country.

Airman Leadership School Resident Program

Internet Address

<http://www.au.af.mil/au/barnes/>

Mission. *Prepare senior Airmen for increased responsibilities as professional war-fighting personnel who can supervise and lead USAF work teams to support the employment of air, space, and cyberspace power.*

Airman Leadership School (ALS) is an Air Force education program implemented at the base level to prepare senior Airmen for positions of greater responsibility. In April 1991 the USAF directed that AU establish the ALS program. On 1 October 1991 a new and standardized program came online to deliver enlisted EPME to senior Airmen. The stand-up of the new ALS discontinued the Noncommissioned Officer Preparatory Course and the Noncommissioned Officer Leadership School program. ALS is the first level of four EPME programs that enlisted professionals attend during their USAF careers. Functional responsibility for each ALS rests with the local Mission

Support/Force Support Squadron. ALS is currently available as a resident program and a distance learning program.

Curriculum. This CCAF-affiliated course consists of 192 hours of in-residence classes accredited through the SACS. Each student earns 10 hours of undergraduate credit upon completion of the course.

ALS is the critical foundation for EPME and sets the tone for present and future professional development. The program focuses on leadership skills required of supervisors and reporting officials throughout the Air Force. ALS enhances the development of senior Airmen by strengthening their ability to lead, follow, and manage while they gain a broader understanding of the military profession. The student-centered, guided-discussion methodology allows students to share ideas and experiences and work together to achieve various educational objectives in a cohort-designed classroom setting. Formative exercises are an integral part of the ALS curriculum and serve as feedback tools for the student and instructor. Summative objective and performance evaluations are used to determine whether the educational requirements outlined in the program are met. Students must accomplish lesson objectives, including those pertaining to fitness, uniform inspections, and drill and ceremonies using the criteria outlined in the program curriculum.

ALS is conducted at 66 active duty Air Force bases worldwide and one ANG base located in the United States. More than 350 ALS faculty members facilitate the thorough and rigorous standardized curriculum. The program is student-centered, and the curriculum is written in plain language; both are focused on developing students' critical-thinking skills. The prominent instructional methodologies are the guided discussion and the case study. Successful completion of the ALS resident program results in college credit from the CCAF.

Learning Outcomes.

- Prepare senior Airmen to supervise and lead work teams,
- Prepare senior Airmen to effectively communicate rank-appropriate tasks, and

- Prepare senior Airmen to exhibit several professional military attributes.

Faculty. The ALS faculty is required to have an associate's degree (or fall within one year of completion) and must complete the EPMEIC before assignment to an EPME school or academy. Within the first year of teaching, the faculty must complete a 180-hour internship at their respective schools.

Duration. The ALS program is delivered in 24 academic days. Most schools conduct eight classes each year.

Eligibility. As a general rule, students are senior Airmen with 48 months' time in service or a staff sergeant selectee. Students must have a minimum of six months of retainability in the Air Force from the class graduation date. The local Military Personnel Flight works directly with the ALS commandant to ensure eligible students are selected.

Students are selected based on the eligibility criteria outlined in AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil>. ETCA course number: ZZ41007.

Curriculum Summary

Instructional Areas	Contact Hours
Profession of Arms	38.50
Warfare Studies	11.00
Leadership Studies	81.00
International Security Studies	6.50
Communication Studies	51.00
Collateral Curriculum	4.00
Total	192.00

Instructional Area Descriptions

Profession of Arms

38.5 Contact Hours

This course offers a study of the military as a profession and the characteristics of the culture that separate the uniformed

service from the society it serves. It focuses on distinctive knowledge, exclusive group coherence, career structure, and the Airman's role in society. The course also addresses core values, discipline, professional ethics, fitness, dress and appearance, oath of office, professional relationships, drill and ceremonies, customs and courtesies, accountability, warrior ethos, and security awareness.

Warfare Studies

11 Contact Hours

This course provides a study of the military instrument of national power. This core area develops an understanding of the nature of war and the art of employing military power across the spectrum of operations. War fighting includes historical and modern people, roles and missions, doctrine, strategy, force structures, joint operations, core competencies, and tactics along with the domains of land, sea, air, space, and cyberspace supporting national security objectives.

Leadership Studies

81 Contact Hours

This course develops and inspires the human dimension from an individual to an organizational level. Broad categories in this area include leadership styles, organizational leadership, functions of management, supervisory skills, mentoring, evaluation systems, diversity management, followership, team building, and group dynamics. In addition, change management, problem solving, time management, and developmental opportunities are integrated.

International Security Studies

6.5 Contact Hours

This course develops an understanding of the nature and functioning of the international system and the strategic environment. Broad categories in this core area include the nature and causes of war and peace, patterns of change and global and regional trends, contemporary problems and issues, and global vigilance. Emphasis is placed on nonmilitary instruments of power and how they affect global, regional, and national security conditions. Global, regional, and cultural awareness are integrated.

Communication Studies**51 Contact Hours**

This course helps students to develop an understanding and ability to apply principles of effective communication (speaking, listening, writing, research, nonverbal communications, negotiations, and critical thinking). Broad categories in this core area include interpersonal communications, group dynamics, cross-cultural communications, and the attendant processes and networks for communication.

Collateral Curriculum**4 Contact Hours**

Collateral curriculum is time given for course introduction, course wrap-up, student surveys, administration, and commandant's time.

**Airman Leadership School
Distance Learning Program****Course 00001***Internet Address*

<http://www.au.af.mil/au/barnes/>

Mission. *Prepare senior Airmen for increased responsibilities as professional, war-fighting Airmen who can supervise and lead USAF work teams to support the employment of air, space, and cyberspace power.*

The ALS DL course was activated in September 1988 and has undergone several revisions. The ALS DL program (course 1) is an Air Force education program that prepares AFRES and ANG senior Airmen for positions of greater responsibility. The non-resident DL program is the critical foundation for EPME and sets the tone for present and future professional development.

Curriculum. This CCAF-affiliated course consists of 114 hours accredited through the SACS. Each student earns six hours of undergraduate credit upon completion of the course.

The program focuses on leadership skills required of supervisors and reporting officials throughout the Air Force. The ALS DL program enhances the development of senior Airmen by strengthening their knowledge about leadership, followership, and management while they gain a broader understanding of the military profession. The ALS DL program is a voluntary, three-volume, paper-based, self-study course administered by AU. This EPME DL program is designed to provide professional development to enlisted military members at a specific and critical point in their career. Students must review the AU catalog frequently during their enrollment to ensure compliance with any changes in administrative policies. A single closed-book, end-of-course examination covering the three volumes of material in the ALS DL program is administered at a designated/authorized test control facility located on almost every military base. Successful completion of the ALS DL program results in college credit from the CCAF.

Outcomes.

- Prepare senior Airmen to supervise and lead work teams.
- Prepare senior Airmen to effectively communicate rank-appropriate tasks.
- Prepare senior Airmen to exhibit several professional military attributes.

Duration. The course consists of a single academic term of 12 months. This enrollment period begins on the date course materials are mailed to the student. The 12-month enrollment period includes time required to receive materials, order/receive tests, and submit tests for scoring/posting. There is no waiver to the 12-month enrollment period except as noted in the administration section of the Directorate of Education Logistics and Communications (A4/6) catalog (<http://www.au.af.mil/au/afiadl/main.htm>).

Eligibility.

- Air Force Reserve personnel. As a general rule, students are senior Airmen with 48 months in service. They are eli-

gible to enroll if they meet the criteria outlined on the Directorate of Education and Logistics (A4/6) Web site (<http://www.au.af.mil/au/afiadl/main.htm>).

- Air National Guard personnel. As a general rule, students are senior Airmen with 48 months time in service or staff sergeants who were promoted under the EPME Air Force promotion deferment policy. Students are eligible to enroll if they meet the criteria outlined on the Directorate of Education and Logistics (A4/6) Web site at (<http://www.au.af.mil/au/afiadl/main.htm>).
- Active duty Air Force personnel are not eligible to enroll in the ALS DL program.

Curriculum Summary

00001 Instructional Areas	Contact Hours
Volume 1 Profession of Arms	30
Volume 2 Leadership Studies	57
Volume 3 Communication Studies	27
Total	114

Instructional Area Descriptions

Profession of Arms

30 Contact Hours

This study of military culture characteristics separates the uniformed service from the society it serves. This core area integrates six units of instruction focusing on students' knowledge, understanding, and skills necessary to succeed as supervisors supporting national security strategy. Broad areas of enlisted heritage, dress and appearance, Air Force standards, total and joint force concepts, and military citizenry are designed for students to value their evolving role as Airmen in the profession of arms.

Leadership Studies

57 Contact Hours

This course enables students to develop the human dimension of organizational professionals and prepare students for

many situations involving human interaction. This core area is divided into six units of instruction focusing on philosophy, concepts, principles, and operating practices of effective leadership. Broad areas cover the enlisted force structure, the enlisted evaluation system, organizational leadership and management skills, the professional environment, and human resources development. Numerous exercises are used throughout this core area to reinforce concepts and principles.

Communication Studies

27 Contact Hours

This course helps students to understand principles and techniques that are keys to effective communication. This core area is divided into three units of instruction that focus on broad categories to develop the writing and speaking skills necessary to be more effective communicators. Other topics include barriers to effective communication and the supervisor's role and responsibilities in recognition programs. Numerous exercises are used throughout this core area to reinforce concepts and principles.

NCO Academy Resident Program

Internet Address

<http://www.au.af.mil/au/barnes/>

Mission. *Prepare technical sergeants to be professional, war-fighting Airmen who can manage and lead Air Force units in the employment of air, space, and cyberspace power.*

In October 1993 a Headquarters USAF program action directive ordered the transfer of the eight continental US (CONUS) noncommissioned officer academies (NCOA) from Air Force major commands (MAJCOM) to AETC. In November 1993 AETC assigned these academies to the newly formed College for Enlisted Professional Military Education (now the Barnes Center). Currently, six NCOAs aligned under the Barnes Cen-

ter operate in the CONUS at Maxwell-Gunter, Keesler (Mississippi), Kirtland (New Mexico), Lackland (Texas), Peterson (Colorado), and Tyndall (Florida) Air Force bases. The CMSgt Paul H. Lankford Enlisted PME Center's noncommissioned officer academy at McGhee-Tyson ANG Base is located near Knoxville, Tennessee, and falls under functional control of the ANG training and education center (TEC). The Lankford Center is an affiliated CCAF campus that meets USAF standards and executes Barnes Center academic policies and curricula. Air Force MAJCOMs overseas operate their own academies. Pacific Air Forces has three academies located at Elmendorf AFB, Alaska; Kadena AB, Okinawa, Japan; and Hickam AFB, Hawaii. US Air Forces, Europe, has one academy at Kapaun Air Station, Germany. NCOA is currently available as a resident program and a nonresident distributed learning program.

Curriculum. This CCAF-affiliated course consists of 223 hours of in-residence classes accredited through the SACS. Each student earns 11 hours of undergraduate credit upon completion of the course.

This PME course prepares NCOs to be professional, war-fighting Airmen who can lead and manage Air Force units in the employment of air and space power. The NCOA's 223-hour curriculum consists of five academic areas—profession of arms, warfare studies, international security studies, communication studies, and leadership studies. The principal method of instruction is the guided discussion and case studies. Formative exercises are integral to NCOA curriculum and serve as feedback tools for the student and instructor. Summative objective and performance evaluations determine whether established educational requirements outlined in the course are met. Students must accomplish lesson objectives, including those pertaining to fit-to-fight and drill and ceremonies using the criteria outlined in the course curriculum.

Learning Outcomes.

- Prepare NCOs to lead and manage units.

- Prepare to effectively communicate rank-appropriate tasks.
- Model professional military attributes.

Faculty. The NCOA faculty is required to have an associate's degree (or fall within one year of completion) and must complete the EPME Instructor Course before assignment to an EPME school or academy. Within the first year of teaching, the faculty must complete a 180-hour internship at their respective schools.

Duration. The NCOA program is delivered in 28 academic days and is conducted at 11 locations worldwide, with most NCOAs operating seven classes each year.

Eligibility. Students are technical sergeants and technical sergeants-select with six months of retainability upon completion of the NCOA. Students must complete the NCOA before they assume the grade of master sergeant. Local military personnel flights manage this process for each base. Quotas are distributed by AETC and managed by each MAJCOM annually.

Students are selected based on the eligibility criteria outlined in AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil>. ETCA course number: YNCOA XXX.

Curriculum Summary

Instructional Areas	Contact Hours
Profession of Arms	26
Warfare Studies	16
Leadership Studies	84
International Security Studies	10
Communication Studies	61
Collateral Curriculum	26
Total	223

Instructional Area Descriptions

Profession of Arms

26 Contact Hours

The Profession of Arms is a study of the military as a profession. It focuses on distinctive knowledge, wellness, core values, professional ethics, dress and appearance, and drill and ceremonies.

Warfare Studies

16 Contact Hours

Warfare Studies examines the military instrument of national power and develops an understanding of the nature of war and the art of employing military power across the spectrum of operations.

Leadership Studies

84 Contact Hours

Leadership Studies explores a wide range of leadership from the individual to the organization, including situational leadership, discipline, human behavior, performance management, problem solving, change, and conflict management.

International Security Studies

10 Contact Hours

International Security Studies consists of the national security strategy, instruments of national power, security issues, and global, regional, and cultural awareness.

Communication Studies

61 Contact Hours

Communication Studies develops an understanding, appreciation, and ability to apply principles of effective communication relevant to an NCO (speaking, listening, writing, editing, counseling, and nonverbal communication).

Collateral Curriculum

26 Contact Hours

Collateral curriculum is time given for course introduction, course wrap-up, student surveys, administration, and commandant's time.

NCO Academy Distance Learning Program

Internet Address

<http://www.au.af.mil/au/barnes/>

Mission. *Prepare technical sergeants to be professional, war-fighting Airmen who can manage and lead Air Force units in the employment of air, space, and cyberspace power.*

The NCO PME DL course was activated in May 1964 and has undergone several revisions. The NCO PME DL course series (course 00009) prepares technical sergeants for positions of increased responsibility by broadening their leadership and supervisory skills and expanding their perspective of the profession of arms. It provides professional development to enlisted military members at specific and critical points in their career. The course presents similar, but not parallel, material to the resident program.

Curriculum. This CCAF-affiliated course consists of 123 hours accredited through the SACS. Each student earns eight hours of undergraduate credit upon completion of the course series.

The NCO PME DL program is a voluntary, three-volume, paper-based, self-study course administered by AU. The 12-month enrollment period includes time required to receive materials, order/receive tests, and submit tests for scoring/posting. There is no waiver to the 12-month enrollment period except as noted in the administration section of the Directorate of Education Logistics and Communications (A4/6) catalog at (<http://www.au.af.mil/au/afiadl/main.htm>).

A single, closed-book, end-of-course examination covering all three volumes of material in the NCO PME DL program concludes the course. The test is administered at the designated/authorized test control facility located on almost every military base. Successful completion of the NCO PME DL program results in college credit from the CCAF.

Learning Outcomes.

- Prepare NCOs to lead and manage units. Prepare them to effectively communicate rank-appropriate tasks.
- Model professional military attributes.

Duration. The course consists of a single academic term of 12 months. This enrollment period begins on the date course materials are mailed to the student.

Eligibility. The course is available to AFRES, ANG, any other military component personnel in the grades E-5 and E-6 with a 7-skill level in their primary Air Force specialty code and to nonmilitary technician civil service members in the grade of GS-5 or equivalent wage grade, wage leader, and wage supervisor. ANG personnel promoted to master sergeant under the EPME Air Force promotion deferment policy are also eligible to enroll in the course. Active duty personnel are not eligible to enroll in the course.

Reference AFI 36-2301, *Professional Military Education*, and the Directorate of Education Logistics and Communications (A4/6) catalog at (<http://www.au.af.mil/au/afiadl/main.htm>) for more information.

Curriculum Summary

00009 Instructional Areas	Contact Hours
Profession of Arms	22
Leadership and Management	72
Communication Skills	29
Total	123

Instructional Area Descriptions

Profession of Arms

22 Contact Hours

The Profession of Arms course addresses subject matter that uniquely characterizes and separates uniformed service from the society we serve. The lessons thoroughly address the obli-

gation of each NCO to promote the occupational professionalism of the profession of arms.

Leadership and Management

72 Contact Hours

The Leadership and Management course covers human resources and organizational management. These topics provide technical sergeants with the basic understanding of human behavior, human relations, and human resource development—critical aspects they will need to develop their subordinates.

Communication Skills

29 Contact Hours

This course consists of basic communication, writing, and speaking skills. It is designed to help technical sergeants become effective in both spoken and written communication.

AF Senior Noncommissioned Officer Academy Resident Program

Internet Address

<http://www.au.af.mil/au/barnes>

Mission. *Prepare senior noncommissioned officers to lead the enlisted force in the employment of air, space, and cyberspace power in support of our national security objectives.*

The Air Force established the Air Force Senior NCO Academy (AFSNCOA) in 1972 to fill a void in the professional military education for Air Force senior NCOs. In January 1973 the AFSNCOA began its first class with 120 senior NCOs and a curriculum divided into two major areas: military environment and military management. The academy now has an annual enrollment of over 1,800 senior NCOs, chief petty officers, sergeants major, and international senior NCOs and offers instruction in five major areas.

In 2003 the secretary of the Air Force and Air Force chief of staff approved the testing of an initiative designed to improve

interaction between officers and enlisted members in the PME environment. The initiative called for students attending the Air and Space Basic Course (ASBC) and AFSNCOA to merge in teams for instruction with the goal of increasing understanding and appreciation of the talents officers and enlisted Airmen bring in projecting airpower.

Curriculum. This CCAF-affiliated course consists of 264 hours of in-residence classes that are accredited through the Southern Association of Colleges and Schools (SACS). Each student earns 10 hours of undergraduate credit with CCAF upon completion of the course. This course provides an advanced PME program for selected senior NCOs to better prepare them for leadership responsibilities by expanding their leadership and managerial capabilities and their perspective of the military profession. The curriculum, designed to meet senior NCO needs, consists of lectures and small group work seminars. The primary instructional methodology is the 12-to-16-member guided discussions. In this forum, students share ideas and experiences and work collectively to achieve various educational objectives. Members of the academy's faculty and speakers from Headquarters USAF, AU, other commands, and civilian agencies lecture at the academy. The academy's curriculum advances the belief that the senior NCOs attending the course bring with them some understanding and competence in all areas of the curriculum.

Learning Outcomes.

- Prepare senior NCOs to lead the enlisted force.
- Prepare senior NCOs to effectively communicate rank-appropriate tasks.
- Model and develop professional military attributes.

Faculty. The AFSNCOA faculty is required to have an associate's degree (or fall within one year of completion) and to complete the EPME Instructor Course before assignment to the academy. Within the first year of teaching, faculty must complete a 120-hour internship at the school.

Duration. The AFSNCOA program is delivered in 33 academic days, five classes each year with 300 to 450 students in each class.

Eligibility. Air Force, selected Air Force Reserve Command (AFRES), and Air National Guard (ANG) senior NCOs attend the resident AFSNCOA. Selected Army, Navy, Coast Guard, and international military personnel also attend on a limited basis. Active duty Air Force personnel must have at least one year of retainability following graduation and complete this course before being promoted to senior master sergeant. The Air Force Military Personnel Center identifies and notifies active duty students for attendance. Air Force students must meet Air Force standards. Students from other services must meet their services standards.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA Course number: MAFSNCOA100.

Curriculum Summary

Instructional Areas	Contact Hours
Military Professional	57
Joint War Fighter	34
Operational Manager	60
Senior Communicator	45
Combined Operations	24
Objective Exercises/Evaluations	17
Collateral Curriculum	27
Total	264

Instructional Area Descriptions

Military Professional

57 Contact Hours

This course offers a study of the military as a profession and the characteristics of the culture that separate the uniformed services from the society they serve. It focuses on distinctive knowledge, exclusive group coherence, career structure, and

the Airman's role in society. It also addresses core values, discipline, professional ethics, fitness, dress and appearance, oath of office, professional relationships, drill and ceremonies, customs and courtesies, accountability, warrior ethos, and security awareness.

Joint War Fighter

34 Contact Hours

This study promotes the notion that the responsibilities for protecting our nation, preventing future conflicts, and prevailing against adversaries require SNCOs to fully understand the joint environment. SNCOs must be prepared to deploy, employ, fight, and survive across the spectrum of conflict in joint, combined, and multinational environments. Joint war fighters are well versed in joint operations, possess an in-depth understanding of the culture and capabilities of all involved forces, and are able to convey and incorporate the strengths that each force brings to the fight. They understand elements of the planning processes and recognize strategic implications of the emerging war-fighting concepts and capabilities. Joint war fighters help leadership make informed decisions by assessing the best ways to plan, present, and control military resources as they serve the unique requirements of the combatant commander.

Operational Manager

60 Contact Hours

This study enables students to focus on the organizational and personnel management functions that all SNCOs face at their home stations as well as in deployed and joint environments. Operational managers drive change and execute missions through the efficient and effective use of resources; produce excellence through a wide range of career-broadening experiences, education, and training; attract, retain, and develop Airmen and prepare them to operate in all environments; inspire a willingness to do what is right; ensure professional duties take precedence over personal desires; and master processes that ensure the Air Force remains the world's premier air and space force.

Senior Communicator**45 Contact Hours**

This study develops an understanding of and an ability to apply principles of effective communication (speaking, listening, writing, research, nonverbal communications, negotiations, and critical thinking). Broad categories in this core area include interpersonal communications, group dynamics, cross-cultural communications, and the attendant processes and networks for communication.

Combined Operations**24 Contact Hours**

This three-day portion of the course allows SNCOs to share perspectives with company grade officers (CGO) attending the ASBC. The SNCOs and CGOs participate in lessons and exercises designed to establish a foundational framework for an SNCO mentor relationship with CGOs. This Air Force chief of staff initiative expects CGOs, when supervising and commanding, to team up with senior enlisted personnel to ensure a united front in matters involving personnel and operations.

Objective Exercises/Evaluations**17 Contact Hours**

These hours allow time for administering and reviewing tests.

Collateral Curriculum**27 Contact Hours**

Collateral curriculum is time given for course introduction, course wrap-up, student surveys, administration, and commandant's time.

**AF SNCO Academy
Distance Learning Program**

Course 00014

Internet Address

<http://www.au.af.mil/au/cepme/course12/>

Mission. *Prepare senior noncommissioned officers to lead the enlisted force in the employment of air, space, and cyberspace power in support of our national security objectives.*

The SNCO professional military education (PME) distance learning (DL) course was activated in October 1973 and has undergone several revisions. This program prepares SNCOs for positions of greater responsibility and enhances the development of SNCOs by strengthening their knowledge about leadership and management while they gain a broader understanding of the military profession. The SNCO PME DL program is a mandatory self-study course administered by AU. This program is designed to provide professional development to enlisted military members at a specific and critical point in their careers.

Curriculum. The SNCO PME DL course is a CCAF-affiliated course delivered via the World Wide Web (course 14). SNCO PME DL consists of 61 hours accredited through the SACS. Students earn four hours of undergraduate credit upon completion of the course. As of 6 January 2009, course 12, the CD-ROM version, is not available for new enrollments; however, support is available for students still enrolled who wish to complete the course.

Students must review the administration section of the Directorate of Education Logistics and Communications (A4/6) catalog (<http://www.au.af.mil/au/afiadl/main.htm>) frequently during their enrollment to comply with any changes in administrative policies. There is no single end-of-course examination for the SNCO PME DL program. Students are evaluated following each subcourse through summative examinations at a designated/authorized test control facility located on almost every military base.

Learning Outcomes.

- Prepare senior NCOs to lead the enlisted force.
- Prepare senior NCOs to effectively communicate rank-appropriate tasks.
- Model and develop professional military attributes.

Duration. The SNCO PME DL program consists of a single academic term of 72 months for students to complete the program. This enrollment period begins on the date course materials are mailed to the student.

Eligibility.

- Active duty Air Force personnel. As a general rule active duty personnel in the grade of master sergeant, master sergeant-select, or above are eligible for course 14. Students are eligible to enroll if they meet criteria outlined in AFI 36-2301, *Professional Military Education*.
- Air Force Reserve personnel. As a general rule, students are technical sergeants/master sergeants (or master sergeants promoted to senior master sergeants under the EPME Air Force promotion deferment policy) with at least one year since completion of the NCOA, resident or DL. Students are eligible to enroll if they meet criteria outlined on the Directorate of Education Logistics and Communications (A4/6) Web site (<http://www.au.af.mil/au/afiadl/main.htm>).
- Air National Guard personnel. As a general rule, students are technical sergeants (no minimum time in service required) or master sergeants promoted to senior master sergeants under the ANG EPME deferment policy. Students are eligible to enroll if they meet the criteria outlined on the Directorate of Education Logistics and Communications Directorate (A4/6) Web site (<http://www.au.af.mil/au/afiadl/main.htm>).

Curriculum Summary

00014 Instructional Areas	Contact Hours
Profession of Arms	13
Communication Skills	15
Behavior Analysis	9
Human Resource Development	9
Organizational Management	15
Total	61

Instructional Area Descriptions

Profession of Arms

13 Contact Hours

Students must understand and communicate to subordinates how unit-level duties fit in the larger context of joint operations that support national policy. They also gain knowledge of the heritage and history of the enlisted corps. The profession-of-arms topics expand student knowledge of the role of the Air National Guard and the Air Force Reserve. Such subjects as strategy and foreign policy are discussed. Students also hear perspectives of a former AF chief of staff, a former prisoner of war, and other influential people.

Communication Skills

15 Contact Hours

Students are exposed to developmental lessons designed to help them understand how effective communication skills enhance their leadership ability. They receive instruction in preparing and organizing both written and spoken communications, developing effective paragraphs, supporting assertions, and editing written communication.

Behavior Analysis

9 Contact Hours

This area enables leaders to know and understand why people act and react as they do. With lessons examining behavior from many angles, students gain a broader perspective of the diverse patterns of behavior displayed by subordinates.

Human Resource Development

9 Contact Hours

This series of lessons provide students with leadership tools and methods used to improve subordinates' overall job performance and to adjust leadership and supervisory style to subordinates experience and needs. These lessons allow students to explore the different theories of motivation and learn how to motivate workers to do their best work.

Organizational Management

15 Contact Hours

The lessons in this area provide students with a broad view of organizational design and structure. Students learn how to

be proactive in a leadership role as they face organizational restructuring and constant change.

Chief Master Sergeant Leadership Course

Mission. *Provide newly selected chief master sergeants with an operational perspective in their role as senior enlisted leaders.*

In January 2004 the Air Force chief of staff announced the stand-up of a new, top level of enlisted PME for personnel selected for promotion to chief master sergeant. This capstone of enlisted PME, aptly named the Chief Master Sergeant Leadership Course (CLC), provides new chief master sergeants (CMSgt) with foundational strategic-level leadership knowledge that is invaluable to the employment of air, space, and cyberspace forces in support of national security. In August 2004 the inaugural CLC completed a successful test run and entered full production in February 2005. The CLC is conducted at the Air Force Senior NCO Academy at Maxwell-Gunter AFB, Alabama.

Curriculum. The curriculum consists of approximately 70 hours across three broad domains of learning: the developing chief master sergeant, the expeditionary chief, and the chief as senior enlisted leader/manager. The primary instructional methodologies include the formal lecture, informal lecture, guided discussion, question and answer sessions, panel discussions, and guided activity used to facilitate the achievement of refined learning objectives, with all instruction tied back to one or more of the core curriculum areas.

Mentors. Each class of several hundred students is divided into smaller seminars of 12 to 14 students so they can participate in guided discussions with their flight facilitator and a chief master sergeant mentor. The mentors set the tone for their seminars and play a pivotal role in the development of new chief master sergeants. Mentors are experienced and mature chief master sergeants who must have a minimum of two years' time in grade, have completed CLC (if promoted to chief

master sergeant in 2006 or later), meet fitness standards as well as lead and participate in fitness programs, possess outstanding oral and written communications skills; and hold a Community College of the Air Force associate degree.

Learning Outcome. Provide chief master sergeants an operational-level perspective of the Air Force and its mission.

Faculty. The AFSNCOA competitively selects faculty members from the AFSNCOA faculty to facilitate this course. Each faculty member is required to have an associate’s degree (or fall within one year of completion) and have completed the EPME Instructor Course and the required internship at the AFSNCOA.

Duration. The AFSNCOA conducts two, eight-day resident CLC classes each year.

Eligibility. Active duty chief master sergeants/selects may attend. Chiefs selected for promotion will attend within the year of selection. Selected AFRES and ANG personnel also attend on a limited basis. The Air Force Chief Master Sergeant Management Office is the lead agent for CLC seat-allocation management and student selection.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA Course number: MCLC001.

Curriculum Summary

Instructional Areas	Contact Hours
The Developing CMSgt	19.50
The Expeditionary CMSgt	15.00
Senior Enlisted Leader/Manager	25.00
Collateral Curriculum	10.50
Total	70.00

Instructional Area Description

The Developing CMSgt

19.5 Contact Hours

This block of instruction is focused on self-awareness and provides the opportunity for continuous development. It will also provide the chief master sergeant a self-assessment; feedback from above, below, and laterally; and a plan for continued leadership development.

The Expeditionary CMSgt

15 Contact Hours

This course provides a broad strategic overview of the US expeditionary Air Force and the challenges faced both now and in our future. It also provides the chief master sergeant a perspective of what leadership issues were faced, what competencies were needed, and the methodologies used in the AOR. This block of instruction also includes information regarding the total force with inputs from the ANG and AFRC.

Senior Enlisted Leader/Manager

25 Contact Hours

This study focuses on the strategic levels of leadership and provides the student with a broad-based perspective and some tools to be used as higher levels of responsibility are assigned to the chief master sergeant.

Collateral Curriculum

10.5 Contact Hours

Collateral curriculum is time given for course introduction, course wrap-up, student surveys, administration, and commandant's time.

USAF First Sergeant Academy

Internet Address

<http://www.au.af.mil/au/barnes/fsa/>

Mission. *Develop, through education and training, selected senior noncommissioned officers to serve as advisors to command-*

ers on issues that impact Airmen in successfully accomplishing the Air Force mission.

The importance of the position of first sergeant has long been recognized in American military ranks. In 1778 at Valley Forge, Baron Von Steuben wrote in the *Regulation for the Order and Discipline of the Troops of the United States*, "The soldier having acquired that degree of confidence of his officers as to be appointed first sergeant of the company, should consider the importance of his officers; that the discipline of the company, the conduct of the men, their exactness in obeying orders and the regularity of their manners, will in great measure depend on his vigilance. The first sergeant . . . is to be always in camp or quarters, to answer any call that may be made." Through the years, persons selected for first sergeant duty primarily trained themselves in their duties and responsibilities, taking over where their predecessors left off.

With increases in technology, advances in the complexity of administrative and legal procedures, and the need for improved human relations, the USAF saw that first sergeants needed to receive formal training. The First Sergeant Course was established at Keesler AFB in October 1973 and was renamed the USAF First Sergeant Academy (FSA) in 1982. The academy remained at Keesler until July 1993, when it was moved to Maxwell AFB under the authority of order G-65 and aligned with the Ira C. Eaker Center for Professional Development. In January 2006 the academy became "Total Force," training men and women from active duty, ANG, and AFRC side by side in the classrooms. In July 2008 the academy was realigned under the Thomas N. Barnes Center for Enlisted Education. The primary 122-hour FSA program offers seminars for active-duty, guard, and Reserve personnel. Separate seminars for active-duty first sergeants are also offered.

Curriculum. This CCAF-affiliated course consists of 122 hours in residence with the additional duty seminars consisting of 40 hours. All programs are accredited through the SACS with student credit earned as follows: USAF First Sergeant Academy, 5 credits; USAF First Sergeant Additional Duty, 2 credits; USAF First Sergeant Academy ANG Add Duty, 2 credits; USAF AFRC

First Sergeant Academy Add Duty, 1 credit. In 2006 the in-residence curriculum was revised to reflect the background of its students and to produce first sergeants capable of meeting the needs of the Air Force as well as their assigned components. The academy's curriculum is divided into five major areas: unit administration, human resources preventive intervention, quality force management, military justice, and deployment issues.

The USAF First Sergeant Academy constantly puts forth initiatives and course updates to increase the efficiency and effectiveness of the academy and improve the quality of instruction. Based on surveys from field-experienced first sergeants, graduates, commanders, command chiefs, and utilization and training workshops, the academic curriculum is continually being revised. These revisions allow the academy to adjust the curriculum to meet current needs of Air Force first sergeants. Web-based instruction provides such continuation training on demand using technologies as interactive training and digitized role playing. The school's web page provides a one-stop service for first sergeants to access critical reference material used daily and information for continuity purposes. Scenario-based learning and role-playing exercises continue to propel each student to higher levels of learning.

Learning Outcomes.

- Prepare first sergeants to lead, advise, and mentor the enlisted force.
- Provide tools for first sergeants to advise and assist commanders with all matters affecting health, welfare, morale, well-being, and discipline of the enlisted force.
- Encourage cross-talk and networking to reduce or eliminate barriers between each of the three components.

Faculty. All personnel selected as FSA faculty must carry the first sergeant AFSC. The FSA faculty is required to have an associate's degree and must complete the Academic Instructor Course (AIC) after arrival. Within the first year of teaching, the faculty must complete a 180-hour internship at the FSA.

Duration. The USAF FSA course is 15 academic days and enrolls up to 44 students in each class. The FSA's ANG and AFRES courses are also 15 academic days and can enroll up to 25 ANG and 10 AFRES students in each class. All courses have eight offerings each fiscal year.

Eligibility. The USAF FSA course enrolls master sergeants from active duty, ANG, and AFRES personnel. Refer to AFI 36-2113, *The First Sergeant*, for the application, training, and selection process for first sergeant duty in each of the three components.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MFSA8F000.

Curriculum Summary

Instructional Areas	Contact Hours
School Administration	12
Physical Training	10
Testing	3
Commandant Time	13
Unit Administration	25
Human Resource Preventive Intervention	17
Quality Force Management	14
Military Justice	14
Deployment Issues	14
Total	122

Instructional Area Descriptions

School Administration **12 contact hours**

Accomplish the administrative details incidental to the USAF First Sergeant Academy, conduct in-processing, and review course curriculum.

Physical Training **10 contact hours**

Students participate in physical training programs.

Testing **3 contact hours**

Evaluate level of understanding with end-of-course test; instructors conduct test review.

Commandant Time **13 contact hours**

The commandant and other guest speakers share information/views about their policies and programs impacting the role of the first sergeant.

Unit Administration **25 contact hours**

Comprehend the scope and responsibilities of a first sergeant.

Human Resource Preventive Intervention **17 contact hours**

Comprehend and value how preventive intervention impacts the unit.

Quality Force Management **14 contact hours**

Comprehend quality force management policies, practices, and procedures as a tool for corrective actions.

Military Justice **14 contact hours**

Know contents of *Manual for Courts-Martial* and comprehend the applications of its principles.

Deployment Issues **14 contact hours**

Comprehend the first sergeant's role and responsibilities in a deployment process and apply the information in a deployment scenario.

AIR UNIVERSITY NONDEGREE PROGRAMS

Air University's PME schools prepare junior, mid-career, and senior commissioned officers and selected civilians for progressively more responsible positions through the Air Force and DOD. All colleges, schools, and programs operate within the framework of the Air Force continuum of education; a coordinated and integrated educational system that links curricula across Air University so that each college, school, and program builds on the education provided at the previous level. This continuum includes five core areas: the profession of arms, military studies, international security studies, communication studies, and leadership and management studies. PME for officers includes AWC, ACSC, and SOC.

This section also addresses officer accession and training schools and professional continuing education.

Air War College Distance Learning Program

17th Edition

Internet Address

<http://www.au.af.mil/au/awc/DL/>

Mission. *To prepare students to lead in a joint, interagency, and multinational environment at the strategic level across the range of military operations; to develop cross-domain mastery of joint air, space, and cyberspace power and its strategic contributions to national security; and to advance innovative thought on national security, Department of Defense, and Air Forces issues.*

Many military officers and federal government employees do not have the opportunity to attend senior developmental education in residence. DL offers a challenging senior professional development opportunity regardless of their location. The AWC DL program reflects the subject areas covered in the resident program's core curriculum along with selected electives to create a professional military education experience for those officers and DOD civilians unable to attend AWC in residence.

Students may complete their requirements in student-led seminars, as independent learners, or by a combination of these two. Examinations, writing requirements, due dates, and course materials are identical regardless of the completion method.

Independent study is an excellent alternative for those students desiring a great deal of flexibility due to an extensive temporary duty schedule or unique family needs or for those who may or may not have the option of participating in a student-led seminar. Most students complete this self-paced program in about 20 months.

Unlike the resident program, AWC DL students do not receive a master's degree or JPME credit upon completion of the program. However, they can request a transcript from the AU Registrar's office and apply for admission with one of several participating universities and colleges offering master's degree programs for AWC DL graduates. These programs vary in the

number of credits they accept towards completion of their degree programs.

Curriculum. The AWC DL program is a senior developmental education program. The curriculum consists of one elective and five core courses. The elective must be completed first, within 12 months. The core courses should be completed in the following order: Foundations of Strategy (FS), National Security and Decision Making (NSDM), Global Security (GS), Joint Military Operations (JMO), and Joint Strategic Leadership (JSL). All elective and core course requirements must be completed within 36 months of initial enrollment.

In addition to completing an elective and the core courses, there is one more mandatory requirement, the READI assessment. The READI assessment gives students an assessment of basic distance learning skills (typing, reading comprehension, and computer skills) and identifies their learning styles. Average time to complete assessment is one hour.

Learning Outcomes.

- Prepare critical thinkers who are able to analyze complex political-military situations and articulate strategic thought from a joint perspective.
- Prepare graduates who are ready to lead in a joint strategic environment and who thoroughly comprehend the profession of arms, with particular emphasis on Air Force competencies of air, space, and cyberspace.
- Prepare strategic leaders who can develop and execute national military strategy that employs armed force, in concert with other instruments of national power, to achieve the goals of national security strategy.

Faculty. DL military faculty members are experienced career officers who have served in various specialties. DL civilian faculty members provide continuity and typically serve beyond the tenure of the military faculty. All faculty members have at least a master's degree and are graduates of a senior developmental education program.

Duration. Most students complete the program within 20 months. The time a DL student takes to complete the program depends on such factors as official duties, deployments, and other time commitments. Students are encouraged to set realistic goals to proceed through the AWC distance learning program at a reasonable pace. Completing one lesson each week allows the student to graduate in about 20 months.

Eligibility.

- **Military.** The list includes O-5 selects and above. Persons may be active duty, AFRES, or ANG; sister-service active duty, Guard, or Reserve; or Civil Air Patrol. Refer to AFI 36-2301, *Professional Military Education*, 27 July 2002, paragraph 3.3 for guidance.
- **Civilian.** Federal civil service employees in the grade of GS-14/15, National Security Personnel System (NSPS) employees in pay bands 3, 4, or lab/demo employees in grades DR-III/IV are eligible.
- **International.** International applicants must be an O-5 select or higher. International officers must request enrollment via the Air Force Security Assistance Training (AFSAT) program office. Refer to AFI 36-2301, *Professional Military Education*, 27 July 2002, paragraphs 3.7.2 through 3.7.6, for guidance.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MAWC002.

Enrollment. Military personnel should enroll in AWC DL via the Air University Student Information System (AUSIS) at <https://ausis.maxwell.af.mil>. Eligible civilian personnel must contact AWC/DL to accomplish the enrollment. International students will be enrolled by AWC/DL once approved by AFSAT.

Completion Requirements. Students must score 70 or better out of 100 to graduate and receive program credit.

Curriculum Summary (17th Edition)

MAWC002 Curriculum Areas	Lessons	Contact Hours
FS 42A Foundations of Strategy	12	99
NSDM 42B National Security and Decision Making	12	99
GS 42C Global Security	12	99
JMO 42E Joint Military Operations	12	99
JSL 42F Joint Strategic Leadership	12	99
EL 42D Electives Program (one required)	10	60
Total		555

Note: Courses taken in the DL program may not be used to satisfy course requirements of the resident program.

Course Descriptions

The DL program (17th edition) includes core curriculum and an elective. The core curriculum consists of five courses: Foundations of Strategy (FS), National Security and Decision Making (NSDM), Global Security (GS), Joint Military Operations (JMO), and Joint Strategic Leadership (JSL). Additionally, students must complete one elective (EL) before enrolling in the first core course.

FS 42A Foundations of Strategy

99 Contact Hours

The FS course develops senior leaders who can ethically develop and evaluate strategy in the pursuit of national interests. This foundation is laid by examining various theorists' concepts and how they have applied to conflicts throughout history and to today's military operations. The course pays special attention to strategy development for the venues of air, space, and cyberspace; the impact of airpower on national and military strategy; and the challenges of information-age warfare. This course serves as the foundation for further study in other courses that examine the national security decision-making process and the application of military power as a means to attain national objectives.

NSDM 42B National Security and Decision Making

99 Contact Hours

The NSDM course assesses the processes for developing US security strategy and policy as well as the use of the national

instruments of power in support of that policy and strategy. The course does this by evaluating the current US national security strategy and interests, state and nonstate threats, and the roles of the instruments of power in countering those threats. The course also focuses on the national security decision-making processes by assessing the role and impact of civil-military relations, the interagency process, Congress, and public opinion in policy development and execution.

GS 42C Global Security

99 Contact Hours

The Global Security course examines the roles of nations in addressing key issues shaping the global environment. The course also identifies growing and emerging security concerns beyond the military capabilities of state and nonstate actors (e.g., energy security, environmental security, migration, and population growth). The course uses a comparative approach to examine the political and economic elements of actors and their impact across a wide range of global issues. The course assesses the relationship between efforts to democratize states, economic development, and national and international security. The course also analyzes power politics from a region-to-region perspective and the impacts of these regional features with regard to international security.

JMO 42E Joint Military Operations

99 Contact Hours

The Joint Military Operations course prepares senior leaders to deploy, employ, and control joint forces across the spectrum of conflict. The course emphasizes the employment of air and space forces as they contribute to the joint, combined, or coalition environment in support of the national military strategy. The course assesses the best ways to present, plan, and control military resources (United States and coalition) as they serve the unique requirements of the combatant commander. The course analyzes the strategic implications of emerging war-fighting concepts (sister service, global strategic operations, logistics, and special operations), and planning for and evaluation of future threats that are asymmetric to the US experience and expectations. The course also assesses the friction between

joint and service operational concepts as applied to the employment and control of air and space power.

JSL 42F Joint Strategic Leadership 99 Contact Hours

The JSL course educates students in the competencies and awareness needed to move from tactical and operational leadership levels to strategic leadership. The course examines senior leadership competencies required to be successful in today's complex, multicultural expeditionary, and war-fighting environment. It challenges students to develop their vision, expand their conceptual capacity through critical analysis and creative thinking, improve their communication skills, expand their capacity for executive decision making, and refine their capability for change. In addition, the course focuses on acceptance of responsibility, accountability, command, moral values, and awareness of the strategic environment to meet strategic and senior-leader challenges involved in leading large, complex organizations. The course concludes with an interactive simulation to provide cultural awareness and familiarization. It is designed to develop an understanding of the dimensions of culture and other group dynamics in a realistic setting and how those may impact operations and senior-level decision making. Additionally, the Intercultural Development Inventory (IDI) assessment tool is part of this course. The IDI will be completed pre- and post-JSL to measure intercultural sensitivity.

Electives Program

60 Contact Hours

All students must complete one elective before enrolling in the first core course. The Electives Program's major objective is to enhance and complement the core curriculum by providing opportunities to achieve greater depth and breadth of understanding in issues of special interest.

EL 42D1 Language Elective. A language familiarization program is offered in Arabic, French, Mandarin Chinese, Russian, and Spanish.

EL 42D2 Space Operations. This course focuses on military applications of space systems and includes capabilities, limita-

tions, dependencies, and vulnerabilities. Space policies, law, and doctrine establish the guidelines for using space, while orbital mechanics and the space environment place physical limits on the use of space. The course provides an understanding of current space systems and how space supports the war fighter as well as the issues facing senior leaders in applying space power. The readings include background information on space characteristics, limitations, organizations, missions, functions, and contributions to war fighting.

EL 42D3 Communicating for Effect. Senior military leaders must understand the information environment and how it can be exploited for military gain. They must also understand the statutory and policy limitations the government places on the exploitation of information, the communication channels it passes through, and what effects various public affairs actions—integrated into information operations—can generate on US citizens, allies, and adversaries. In addition, students will focus on what measures must be taken to safeguard information and the communication channels it passes through and how the evolving opportunities and challenges in the information environment affect military decision making. This course prepares current and future leaders to exploit the information environment with regard to military operations planning and execution and to use strategic communication in operations planning.

EL 42D4 Medical Support to Joint Operations. This elective provides a close look at how the DOD is postured to provide a fit force for deployment, prevent disease and nonbattle injuries during deployment, force package medics for employment in the field, and ensure medics are ready to care for the wounded beginning at the point of injury and continuing en route back to CONUS. Additionally, the course covers how medics provide unique capabilities to build foreign relations, support special operations, and respond to natural disasters, pandemics, and chemical, biological, and radiological events. The main focus will be on the Air Force Medical Service, but some discussion will compare other service medical capabilities. This elective is designed for students who would like to

understand the details of how health care fits into operational planning at the combatant command level.

EL 42D5 Nonlethal Weapons. The challenge in today's complicated security environment is for US forces to impose control and order on hostile forces with a minimum of casualties to themselves, the belligerents, and/or the surrounding civilian population. This course describes and analyzes these efforts and the issues that underlie nonlethal weapons. It address the past use of nonlethal concepts and technologies; defines the capabilities that could be made available to US armed forces; examines the medical, legal, and public awareness issues involved in their development and use; and analyzes their incorporation into current US military doctrine and strategy.

EL 42D6 Homeland Security and Defense. This course examines threats to and vulnerabilities of the US homeland and the actors, organizations, plans, policies, programs, and resources required to secure and defend the United States. During the Cold War only nation-states could create mass casualty and society-destroying events. Today, such nonstate actors as individuals and small groups can inflict this type of misery. Given this asymmetric threat, brought to light by the events of 11 September 2001 and the 9/11 Commission Report, homeland security and defense have become a top national priority. In 2009, years after 9/11, the United States still faces such threats; the question is if, when, and how such an event will occur and how prepared the United States is to respond.

EL 42D7 Nuclear Weapons. Since their development, nuclear weapons have played a significant role in the national and military security strategies of the United States. This course explores the history of nuclear weapons and their role in deterrence. It discusses the nuclear enterprise and recent changes in the Air Force to reinvigorate this key capability. It also explores regional nuclear issues and the threat of terrorists to use weapons of mass destruction. This course helps senior leaders to understand better the role of nuclear weapons in both historic and modern deterrence theory.

EL 42D8 Counterinsurgency (COIN) and Military Support to Security, Stability, Transition, and Reconstruction (SSTR). Given that the object of war is peace on favorable terms, long-term stability is essential to be for successful in any military operation. This stability often requires COIN efforts to be woven together with SSTR efforts so that they operate concurrently and systematically, building upon each other's successes. This course explores current COIN and SSTR doctrine and both historic and current operations where they played a significant role. This course helps senior leaders to plan and prepare future operations that take into account the complexities of Phase IV operations.

EL 42D9 Sustainable Security. Nations have increased their focus on other global issues such as development (or the lack thereof), environmental damage, population growth and migration, availability of resources, worldwide crime syndicates, presence of global terrorists networks, and the potential of climate change. This elective looks at several different ways “sustainable security” is understood throughout the world. The concentration here falls upon three main areas: environmental, human, and energy. The course examines many of their basic assumptions and how they may play out in the coming years. Not only is this a chance to study several different approaches to national security, but due to the interdependent nature of many of the threats, this is also a chance to understand how other nations view security.

Air Command and Staff College Nonresident IDE–Nonmaster’s Program

Internet Address

www.au.af.mil/au/acsc/distance-learning.asp/

Mission. *Prepare field-grade officers to develop, employ, and command air, space, and cyberspace power in joint, combined, and multinational operations.*

Established in 1948 the ACSC nonresident intermediate developmental education program provides intermediate-level PME to officers unable to attend in residence. In 1969 the college expanded the scope of the program by implementing a seminar-delivery methodology to provide for the sharing of opinions, expertise, and experiences among the seminar members. Both the seminar and the correspondence programs achieved Phase I joint professional military education (JPME) accreditation in 1992 and were reaccredited in 2002, 2004, and 2007. In 1999 the distance learning programs were placed under the dean of DL. The nonmaster's program (NMP) provides PME to about 85 percent of all Air Force majors and majors-select.

As of 1 February 2010, the NMP supports more than 10,000 students: 41 percent US Air Force active duty; 9.5 percent ANG; 14 percent US AFRES; 18.5 percent Navy, Army, and Marine Corps; 14 percent DOD civilians; and 3 percent "other."

Curriculum. The college's curriculum (Version 5.2) is designed to produce a more effective field-grade officer serving in operational-level command or staff positions. The courses emphasize applying air, space, and cyberspace power in joint campaign planning and the operational art of war. The course of study is an integrated process. It begins with lessons designed to enhance the students' leadership and command skills and concludes with an exercise that offers students an interactive, educational experience in planning, generating, and employing air and space forces in support of a joint force commander's mission. In between, students explore national security issues; strategy and war theory; air, space, and cyberspace power history and theory; expeditionary Air Force force-employment concepts; and the capabilities and limitations that the US Air Force and its sister services contribute to joint force commanders.

The curriculum is delivered via printed books, DVDs, CD-ROMs, and the Internet. Students receive an integrated multimedia curriculum that includes textbook readings, digitized multimedia offerings, and interactive applications. Students must achieve a minimum score of 70 on each of seven examinations and complete three online exercises and a written re-

quirement. Students may choose several methods to complete the program.

The specific delivery methods for the curriculum are as follows:

- **Nonmaster's Program (self-study).** This self-paced method of study allows students to choose the time and place of study. The college offers a framework for completing this program within the 18 months allotted by providing a recommended schedule for students to follow. To enhance flexibility, however, students may enroll anytime and deviate from the recommended completion schedule as time permits. Because of its flexibility, this method is the most popular one for completing the NMP.
- **Base-level Seminar.** In this 10.5-month version of the NMP, students coordinate with their base education office to form the seminar and then meet weekly at participating home stations in a forum designed for the free exchange of ideas and opinions. Seminar participants share unique background experiences and technical expertise. The college provides the framework for conducting the seminar program by providing a schedule for the seminars to follow. The seminars are composed of five to 18 members and may begin anytime colocated students elect to form a seminar. Although seminars typically start in August, to coincide with dependents' school schedules, they can start any time.
- **Air Reserve Component Seminar.** The Air Reserve Component Seminar (ARCS) is specifically focused on the unique needs of select AFRES and ANG students. It is a hybrid seminar-correspondence program, running from one summer to the next. Initially, students assemble in seminars to complete the first two courses of the seven-course curriculum. These seminars are faculty-facilitated, feature guest speakers, and allow students to benefit from shared experiences in a collaborative learning environment. At the end of the two-week period, students return to their homes and have one year to complete the next three courses on their own through correspondence. They reassemble the following summer to complete their final two courses in the enhanced seminar method previously described.

Courses taken in the nonresident program may not be used to satisfy course requirements of the ACSC resident program or the course requirements of the online master's program (OLMP).

Learning Outcomes. ACSC's nonmaster's program builds upon the knowledge and skills imparted through BDE and experience gained as a company grade officer, delivering a relevant educational experience globally and meeting unique demands of expeditionary Airmen. Delivering field-grade officers prepared to develop, employ, and command air, space, and cyberspace power in joint, multinational, and interagency operations. The NMP produces FGOs who

- comprehend operational and strategic command and staff leadership in a joint, whole-of-government, and multinational context;
- are well versed in joint and service perspectives and understand joint planning and operations within the context of operational art across the range of military operations;
- are well grounded in military history, theory, and doctrine across the range of military operations;
- comprehend the US national strategic decision-making process and know how the actors and systems translate policy into action through the use of the instruments of power; and
- comprehend regional expertise and cultural competence as war-fighting enablers.

Faculty. The college employs a blend of expert faculty exceptionally qualified to accomplish its mission and goals. Its unique mission requires a distinctive mix of faculty qualifications and credentials. Traditional civilian academics provide the depth and breadth of subject matter expertise to guarantee the academic rigor of the college's offerings while simultaneously ensuring adherence to validated pedagogical theory and practice. Military officers contribute critical military and operational perspectives, as well as unparalleled currency and expertise, to the subject matters addressed.

Duration.

- Nonmaster's program: 18 months.
- Base-level Seminar: 10.5 months.

Eligibility. The programs are offered to US active duty, Reserve, and National Guard majors, majors-select, and their equivalents from all services. DOD civilian employees in the grade of GS-12 or above or in equivalent NSPS positions may also enroll. Civil Air Patrol officers serving in the grade of major or above may also enroll in the DL program. International applicants for the programs must be majors-select or higher or equivalent-grade civilian employees of the military department of a country or international organization assigned to a DOD billet. International officers may enroll through the Foreign Military Sales training sponsorship program.

Reference AFI 36-2301, *Professional Military Education*, the ACSC public Web site, <http://www.au.af.mil/au/acsc/distance-learning.asp>, and the Education and Training Course Announcements Web site at <https://etca.randolph.af.mil> for further information. ETCA course number: MACSC003.

Enrollment. Students will be enrolled in ACSC upon verification of identity in the AUSIS at <https://ausis.maxwell.af.mil>. They remain enrolled through completion, provided they stay in good standing.

Graduation Requirement. Students must maintain a grade of "B" or better to graduate.

Curriculum Summary

MACSC003 Curriculum Areas	Contact Hours
00030A The Challenges of Leadership and Command	27
00030B National Security Studies	27
00030C Strategy and War	27
00030D Air, Space, and Cyberspace Power	27
00030E Joint Forces	27
00030F Joint Planning	27
00030G Joint Air and Space Operations	27
Total	189

Course Descriptions

00030A The Challenges of Leadership and Command

27 Contact Hours

The Challenges of Leadership and Command course equips field-grade officers with the knowledge and tools to assist them in today's dynamic environment. It builds upon leadership information introduced during previous Air Force PME experiences. Officers must challenge themselves to sharpen inherent skills while striving to become better leaders. The course further introduces students to the special leadership situation of command. Command is based on relationships and is a unique position that brings with it special responsibilities. The course explores these responsibilities and common resources available to individuals to help meet the challenges of command.

00030B National Security Studies

27 Contact Hours

The National Security Studies course demonstrates that military officers must understand today's complex and dynamic national and international security environment to operate effectively at all levels—including the operational level. Military officers must first realize how US policymakers prepare to respond to the security environment through the development of national-level strategies and plans. Only then can officers properly plan for the most effective use of the military instrument of power in synergy with the other instruments of power to protect US national interests.

00030C Strategy and War

27 Contact Hours

The Strategy and War course provides military officers with an understanding of how military strategy and the military instrument of power support the national security strategy and national objectives. Students develop a better understanding of the crucial relationship between levels of strategy and levels of war. The course examines key concepts associated with the use of military force—both the preferred American way of war and other types of warfare more prevalent in some cultures. Stu-

dents also see how the DOD is addressing the evolving emphasis on security and stability operations. Military practitioners must be prepared for the difficult challenges they will face when attempting to apply operational art to achieve strategic goals in complex cultural contexts such as found in Iraq.

**00030D Air, Space, and
Cyberspace Power**

27 Contact Hours

The Air, Space, and Cyberspace Power course is designed to help students understand the most effective methods for employing air and space power by surveying historical examples, leadership influences, and doctrine. The course describes the transformation of air, space, and cyberspace power from the end of World War I through Operation Iraqi Freedom, reveals how that transformation is reflected in current USAF doctrine, and explains how USAF air and space expeditionary force operations provide air and space power for use by combatant commanders. The course introduces such basic Air Force doctrinal concepts as USAF distinctive capabilities and the operational functions of air and space power and helps students grasp the unique capabilities and limitations of modern air and space power. Taken as a whole, this course equips students with the practical information they need to become effective advocates for air, space, and cyberspace power.

00030E Joint Forces

27 Contact Hours

The Joint Forces course prepares students for assignments in joint environments and provides a baseline of knowledge for further studies in joint operations. It explores the intent, organizing principles, and command relationships of joint organizations, while focusing on concepts central to effective joint operations—unity of command, unity of effort, integration, and interdependence. The course then reviews the influences that the individual services have on joint force operations. This is accomplished through a review of how the services present forces, capabilities and limitations of key forces, and service doctrine. Central to this effort is a review of both joint and service doctrine—the best way to conduct military affairs. The

course is presented in three phases and provides an operational-level perspective of joint forces.

00030F Joint Planning

27 Contact Hours

The Joint Planning course provides students with an analysis and comprehension-level understanding of how combatant commanders support global security for US interests at home and abroad. The course summarizes the national-level systems as the driving force behind the complex planning performed by combatant commanders, and then explains doctrinal concepts, including non-US military integration, common terminology, and tools used in joint operation planning. Next, it distinguishes between the two planning processes used at the strategic and operational levels: the contingency and crisis-action planning processes. The course concludes with a hands-on exercise that reinforces key concepts by having the students apply their knowledge in a simulated joint force planning cell.

00030G Joint Air and Space Operations

27 Contact Hours

The Joint Air and Space Operations course examines the people, processes, and products involved in planning, directing, and executing joint air and space operations in support of the joint force commander's operations plan. Using both joint and Air Force doctrines, the course addresses the roles and responsibilities of the JFACC and his or her war-fighting headquarters—the joint air operations center (JAOC). The course describes considerations for employing joint and multinational forces at the operational level of war. The course further introduces students to the fundamentals of space and information operations. Students will use the concepts learned in this course to plan and execute the final exercise of the curriculum, the Joint Air and Space Exercise (JAEX). JAEX requires that students develop a strategy to achieve stated objectives and then execute that strategy by developing air tasking orders (ATO).

Squadron Officer College Faculty Development Course

Internet Address
<http://soc.au.af.mil/>

Mission. *To develop and enrich SOC faculty that can develop Company Grade Officers as leaders of integrity ready to fly, fight, and win in air, space, and cyberspace.*

Curriculum. The SOC faculty consists of personnel who design, develop, or execute SOC's curriculum and includes flight commanders (instructors), squadron commanders, curriculum developers, and faculty development and training personnel. SOC provides initial and continuing faculty development instruction through a variety of offerings.

- Theories and Principles of Adult Education (TPAE) acquaints new faculty with basic flight room educational concepts they will need to execute the ASBC and/or SOS curriculum. Emphasis is on instructional methodologies, educational theory, and classroom management techniques. The course provides an overview/orientation of basic curriculum development concepts including Instructional System Development (ISD), lesson design and execution, and evaluation.
- The Advanced Principles of Instructional Design (APID) course is for instructors selected to develop curriculum in the Academic Affairs Directorate. This course equips newly assigned curriculum developers with information and experience necessary to design and develop a world-class curriculum for SOC. Emphasis is on the analysis, design, and development of curriculum through knowledge of ISD principles. Evaluation principles and test-item analysis are also thoroughly discussed.

Learning Outcomes. SOC faculty development consists of two courses. Each course has specific learning outcomes.

MSOC001 Theories and Principles of Adult Education

- Comprehend educational foundations and their impact on lesson presentation.
- Comprehend how good communication skills impact lesson presentation.
- Apply the correct usage of each instructional method.
- Comprehend educational evaluation.
- Comprehend the principles of the total instructional design process.
- Apply principles of visual aid management.
- Apply principles of instructor expertise and professionalism.

MSOC002 Advanced Principles of Instructional Design

- Apply principles of the “adult learner” and educational foundations in lesson development
- Comprehend how good communication skills impact lesson development
- Analyze need and determine the correct usage of each instructional method
- Comprehend effective use of instructional media
- Apply principles of educational evaluation
- Analyze educational problems using the principles of instructional design process.

Faculty. The SOC Faculty Development Department consists of three full-time personnel but also has access to adjunct professors and instructors resident in the SOC faculty. The department chair holds a terminal degree in education, and the other personnel have expertise in instructional design and are experienced classroom instructors.

Eligibility. TP AE is open to newly assigned SOC faculty. To attend APID, candidates must have completed an SOS and/or ASBC flight commander tour.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers: MSOC001 and MSOC002.

Completion Requirement. Students must maintain a grade of “B” or better to graduate from TP AE or APID.

Curriculum Summary

Course Number and Title	Contact Hours
MSOC001 Theories and Principles of Adult Education	80
MSOC002 Advanced Principles of Instructional Design	80
Total	160

Course Descriptions

MSOC001 Theories and Principles of Adult Education (TPAE) 80 Contact Hours

This 10-day course acquaints new SOC flight commander candidates with basic flight room educational concepts they will need to execute the curriculum of ASBC and/or SOS. Emphasis is placed on instructional methodologies, educational theory, communication skills, and classroom management techniques. The course provides an overview/orientation of basic curriculum development concepts including ISD, lesson design and execution, and student evaluation and assessment. This comprehensive, fast-paced, hands-on course requires extensive reading and moderate levels of research and writing. It culminates in a series of graded student practice-teaching sessions, in which students employ guided discussion, case study, informal lecture, and experiential methodologies to teach the SOC curriculum.

MSOC002 Advanced Principles of Instructional Design (APID) 80 Contact Hours

This 10-day course equips newly assigned SOC curriculum developers with information and experience necessary to design and develop a world-class curriculum for the USAF’s only CGO

professional military education (PME) institution. Emphasis is placed on the analysis, design, and development of curriculum through the knowledge of ISD principles. The course includes extensive discussion on evaluation principles as well as the cognitive, affective, and psychomotor domains of learning. Teaching methods covered include guided discussion, case study, informal lecture, and experiential learning. This comprehensive, fast-paced, hands-on course requires extensive reading and moderate levels of research and writing. This course culminates with students completing and presenting a curriculum project requiring the application of instructional design theories and comprehension of the total ISD process.

Air and Space Basic Course

Resident Program

Internet Address

<http://www.au.af.mil/au/soc/asbc.html>

Mission. *To inspire new USAF officers to comprehend their roles as Airmen who understand and live by USAF core values; can articulate and advocate what air, space, and cyberspace power brings to the fight; and are dedicated as warriors in the world's most respected air, space, and cyberspace force.*

The Air and Space Basic Course (ASBC) was developed as a chief-of-staff initiative to provide a common bonding experience and a means to “learn the family business” for all newly commissioned second lieutenants with a focus on the profession of arms. This course begins with a week of expeditionary skills training at an outdoor learning facility in field conditions where students focus on combat-skills training events. This week and the last week of ASBC serve as the officer counterpart to the enlisted Basic Expeditionary Airman Skills Training (BEAST) experience. Along with these field sessions, students also receive comprehensive classroom instruction on the range of Air Force operational doctrine, applying this doctrine to actual operations underway in Afghanistan. Outdoor activities

emphasize the importance of physical fitness for today's officers. Additionally, the program includes a three-day combined operations period with the AFSNCOA.

ASBC lessons include "combatives" training; self-aid buddy care training; chemical, biological, radiological, nuclear, and explosives training; weapons qualification; introduction to war theory; historical airpower principles; strategic concepts; and the basics of air, space, and cyberspace doctrine. This integrated curriculum includes a focus on hands-on teamwork and leadership skills, improved communication abilities, and a better appreciation of both officer and enlisted force-development issues. The last week of ASBC offers a crucible event spent at an offsite, mock-deployment location in a tent city where students must demonstrate the expeditionary skills learned throughout the course.

During the entire ASBC program, students must act as military teams, using what they have learned in the ASBC curriculum to solve complex problems. Students work as a combat team in a simulated air, space, and cyberspace operational center and develop an appreciation for Air Force systems and capabilities. Through these efforts, ASBC provides the fundamental concepts and motivation for lieutenants to begin learning and inculcating the skills, values, and ethos of professional Airmen. Graduates gain a broad understanding of several USAF specialties and their contributions to mission success, a firm foundation in doctrine, and an appreciation for USAF capabilities. Additionally, graduates return to their duty stations having completed a significant portion of their deployment readiness training, ensuring they are prepared to support their units' important operational missions.

Curriculum. ASBC builds upon knowledge and skills imparted through the precommissioning programs, delivering educated Air Force CGOs who comprehend and value the military as a unique profession requiring commitment to the warrior ethos, enforcement of distinctive standards, and adherence to core values, ethics, and officership.

ASBC produces CGOs who comprehend and value their service's roles and missions, force structure, core competencies, and capabilities as applied in the air, space, and cyberspace

domains and who are qualified in a variety of critical expeditionary war-fighting skills. ASBC equips its students with historical examples to illuminate the practical application of military—and in particular air, space, and cyberspace power—theory as well as Air Force doctrine.

ASBC's CGOs are introspective and constantly seek self-improvement to master their individual specialties and enhance their skills as informal and formal leaders. These CGOs are aware of the unique challenges inherent in today's international security environment and constantly strive to understand and enhance the important role that they, their people, and their units play in this environment. ASBC's CGOs communicate effectively via the written and spoken word to convey their ideas and instructions logically and persuasively.

Learning Outcomes. The Air Force values CGOs who possess a thorough understanding of and embrace the values of the profession of arms; are well versed in the capabilities and force-presentation policies of our service; are well grounded in military history, theory, and doctrine; are capable informal and formal leaders; and can communicate effectively. ASBC helps fill the Air Force's developmental requirements in each area of its curriculum.

- **Learning Area 1 – Profession of Arms Emphasis.** Apply the Air Force core values, ethics, and principles of officer-ship that are distinctive to the profession of arms and service in the US Air Force.
- **Learning Area 2 – Warfare Studies Emphasis.** Comprehend Air Force doctrine, roles and missions, and capabilities and limitations Air Force across its operational domains and in relation to its expeditionary operations.
- **Learning Area 3 – Leadership Studies Emphasis.** Apply introspection techniques and leadership skills to overcome challenges and achieve success as leaders in both formal and informal team settings.
- **Learning Area 4 – International Security Studies Emphasis.** Comprehend the unique challenges and opportunities inherent in today's international security environment.

- **Learning Area 5 – Communication Studies Emphasis.**

Apply communication skills to convey ideas and instructions logically and persuasively via the written and spoken word.

Faculty. All ASBC classroom instructors are captains or majors who have successfully completed MSOC001, Theories and Principles of Adult Education (upon arrival).

Duration. The ASBC program is delivered in 30 academic days.

Eligibility. Newly commissioned officers are eligible to attend ASBC. Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MASBC001.

Completion Requirements. Complete all requirements as outlined in the course syllabus.

Curriculum Summary

MASBC001 Curriculum Areas	Contact Hours
Profession of Arms	73
Leadership Studies	20
Warfare Studies	35
Communication Studies	6
International Studies	3
Combined Operations	17
Administration	15
Physical Fitness	18
Total	187

Course Descriptions

Profession of Arms

73 Contact Hours

At the initial level, issues related to officership, moral and ethical development, accountability, and other responsibilities related to the military profession are raised to a high level of learning (typically the application level). Officers are expected to display the unique traits that separate military pro-

professionals from their civilian counterparts. The Profession of Arms lessons include all expeditionary skills training and readiness education.

Leadership Studies

20 Contact Hours

The focus of Leadership Studies at the initial level of PME centers on team leadership—the tactical-level operations—to provide the tools these officers will need to build and lead small teams and to serve as dynamic followers. The courseware addresses concepts and philosophies these officers can use to improve individual leadership skills and group dynamics, as well as individual and group performance. Students learn adaptive leadership styles to capitalize on opportunities and overcome challenges presented by the situation, the requirements of the mission, and the abilities of peers and followers. Officers at this level are provided opportunities to apply the concepts and techniques they have learned.

Warfare Studies

35 Contact Hours

Emphasis at the initial level of officer PME is on company-grade levels of leadership and the tactical level of war fighting. Officers should understand the role of small teams in expeditionary operations but should also be able to communicate the overall mission of the Air Force in all of its operational domains. Taken together, the breadth of topics addressed at the initial level imbues new Air Force officers with the attitude, tools, and knowledge essential for excellence at the unit level.

Communication Studies

6 Contact Hours

The course in communication studies at the initial level amplifies instruction received at the precommissioning level and provides opportunities to apply the principles of effective communication in giving and receiving feedback. Special attention is given to those listening, speaking, writing, and interpersonal communication skills instrumental to successful team building. Interpersonal communication instruction emphasizes maximizing individual members' potential for the benefit of the entire team. Officers at this level learn to orga-

nize and present well-reasoned and well-supported arguments, both in written and spoken form. Students are also introduced to the opportunities and challenges inherent through strategic communications.

International Studies

3 Contact Hours

The emphasis at the initial level focuses on those aspects of national and international security affairs that provide the broad context within which junior officers and their superiors must operate. Special attention is paid to those national and international security topics that most affect an officer's ability to lead and follow, to communicate, and to understand what it means to be an Airman in today's globalized environment.

Combined Operations

17 Contact Hours

The section on Combined Operations is executed as part of the Profession of Arms and Leadership/Management courses. During this phase of the program, senior NCOs participate with ASBC students in classroom leadership discussions and two challenging field activities: Icarus tournaments (a sports-field simulation of operational air doctrine) and Project-X (a hands-on, problem-solving exercise). These invaluable opportunities for mentorship provide students with unique insights into the NCO corps.

Administration

15 Contact Hours

Administration focuses on the dissemination of critical, administrative information, feedback sessions with the faculty and evaluations of students' understanding of the curriculum.

Physical Fitness

18 Contact Hours

Physical Fitness at ASBC consists of various outdoor physical activities and field exercises designed to instill a greater appreciation for maintaining good physical fitness and the importance of ensuring personnel are physically mission-ready in expeditionary environments. Such activities as Team Challenges require not only physical ability but also employment of problem-solving and team-building skills.

Squadron Officer School Resident Program

Internet Address

<http://www.au.af.mil/au/soc/sos.html>

Mission. *Educate, motivate, and mentor captains as current and future Air Force leaders.*

SOS is the second course in the Air Force officer professional military education (PME) system. The school traces its roots to the Air Corps Tactical School founded in 1946 at Maxwell Field, Alabama. SOS became an arm of Air Command and Staff College in 1950 when the tactical school closed. Col Russell V. Ritchey, founder and first commandant, opened the Squadron Officer Course—the real beginning of SOS—at Maxwell AFB, Alabama, that same year. In 1959 SOS became a separate Air University school reporting directly to the Air University commander. In 2000 SOS merged with the Air and Space Basic Course (ASBC) under the Squadron Officer College (SOC), whose mission focuses on professional development for company grade officers.

Curriculum. SOS builds upon knowledge and skills imparted through precommissioning and ASBC PME and professional experience to deliver to the Air Force CGOs who comprehend and embrace the service's core values and the ethics and principles of officership that are so distinct to the profession of arms and service in the US Air Force.

SOS emphasizes personal, team, and organizational leadership, equipping its students with theory, doctrine, and practical experiences that empower them to seek and capitalize on leadership opportunities through which they spur themselves, their subordinates, their peers, and their units to mission success and organizational excellence. Instruction is illustrated and reinforced through the measured use of military history examples as well as joint and service doctrine.

In support of the school's leadership emphasis, SOS students learn to comprehend and value the capabilities and limi-

tations of the US armed forces and the manner in which joint forces are organized and led to achieve joint force commanders' mission objectives. SOS students are also alerted to the unique challenges inherent in today's international security environment and constantly seek opportunities to achieve success given the myriad constraints and threats that environment encompasses. SOS' students can communicate effectively both formally and informally through both the spoken and written word, conveying their ideas and instructions logically in a manner that informs, motivates, and inspires subordinates and peers alike.

The 145-hour, graduate-level curriculum covers essential leadership competencies outlined in AFDD 1-1, *Leadership and Force Development*, as well as Profession of Arms, Warfare Studies, Effective Communication, and International Security Studies. During the course, students study six modules: Essential Skills; The CGO—Introspection and Self-Awareness; The CGO in the Work Environment—Organizational and Team Leadership; The CGO as a Member of the USAF—"The Family Business"; The CGO as a Component of the US Military—The Joint Perspective; and The CGO and Future Challenges—Strategic and Global Perspectives. Students thus learn about their personal leadership skills and demonstrate not only how they fit into the Air Force but also how their service supports joint, national, and international operations.

Learning Outcomes. The Air Force values CGOs who possess a thorough understanding of and embrace the values of the profession of arms; are well versed in the capabilities and force-presentation policies of our service; are well grounded in military history, theory, and doctrine; are capable informal and formal leaders; and can communicate effectively. SOS helps fill the Air Force's developmental requirements in each area of its curriculum.

- **Learning Area 1 – Profession of Arms Emphasis.** Synthesize the Air Force core values, ethics, and principles of officership distinctive to the profession of arms and service in the US Air Force.

- **Learning Area 2 – Warfare Studies Emphasis.** Comprehend the capabilities and limitations of the US armed forces and the manner in which joint forces are organized and led to achieve joint force commanders' mission objectives.
- **Learning Area 3 – Leadership Studies Emphasis.** Apply personal, team, and organizational leadership theory, doctrine, and skills to achieve mission success and organizational excellence.
- **Learning Area 4 – International Security Studies Emphasis.** Analyze the unique challenges and opportunities inherent in today's international security environment.
- **Learning Area 5 – Communication Studies Emphasis.** Apply communication skills effectively to convey ideas and instructions logically to inform, persuade, motivate, and inspire as appropriate.

Faculty. All SOS classroom instructors are captains or majors who have completed the resident SOS course and MSOC001, Theories and Principles of Adult Education (upon arrival), or its equivalent. Additionally, each instructor undergoes a supervised instruction period.

Duration. The SOS program is delivered in 25 academic days.

Eligibility. SOS targets four- to seven-year captains, select civilians, and international officers. Captains with at least four but fewer than seven years of total active federal commissioned service who are not in a failed or deferred promotion status are eligible to attend SOS. DOD civilians in the grades of GS-9–12 or NSPS equivalent grades, with at least four years of continuous civil service, are also eligible. In addition, a limited number of allied international officers are accepted into SOS classes at various times during the year.

Reference AFI 36-2301, *Professional Military Education*, and the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MSOS001.

Completion Requirements. Complete all requirements as outlined in the course syllabus.

Curriculum Summary

MSOS001 Curriculum Areas	Contact Hours
Profession of Arms Studies	20.1
Warfare Studies	7.6
Leadership Studies	44.6
International Security Studies	12.7
Communication Studies	23.7
Administration	5.3
Total	114.00

Course Descriptions

Profession of Arms Studies

20.1 Contact Hours

At the primary level of PME, officers build upon their understanding of moral and ethical development by applying key concepts of accountability and professionalism to the challenges and opportunities inherent in leadership. Officers will analyze case studies to grasp the unique but vital relationship that binds the US military in obedience to its civilian leadership and in defense of the civilian public. They will also integrate personal and professional values into a warrior ethos consistent with the highest standards of conduct expected of military officers.

Warfare Studies

7.6 Contact Hours

Emphasis at the primary level is on the application of the military as a national instrument of power. Officers should understand their service's roles, missions, distinctive capabilities, core competencies, and structures both in the context of history and the joint operations that they may be called on to support. Officers should also have a working knowledge of the capabilities of sister services to better support the joint war-fighting team.

Leadership Studies**44.6 Contact Hours**

The primary leadership team for the Air Force is the flight; therefore, the focus of Leadership Studies at the primary level of PME is at the flight level. Coverage at the primary level is focused on the tactical level to provide tools officers need to build and lead small teams and serve as dynamic followers. The focus at the primary level is on the dynamics of the interaction between individual leadership skills and group interaction in building successful teams. Instruction is focused on concepts and philosophies officers can use to improve individual leadership skills, adjust leadership styles to the situation, accomplish assigned tasks, and employ followers' abilities effectively. Opportunities are provided for officers to apply the leadership skills and techniques they have learned.

International Security Studies**12.7 Contact Hours**

The emphasis at the primary level of PME is on those aspects of national and international security affairs that provide the broad context within which junior officers and their superiors must operate. Special attention is paid to those national and international security topics that most affect an officer's ability to lead and follow, to communicate, and to understand what it really means to be an Airman in today's globalized environment.

Communication Studies**23.7 Contact Hours**

Communication Studies at the primary level amplifies instruction received at the precommissioning and basic level and provides opportunities to apply the principles of effective communication and receive feedback. Special attention is given to those listening, speaking, writing, and interpersonal communication skills instrumental in team building. Interpersonal communications emphasize maximizing the potential of the individual as a part of a team. Officers learn to create and deliver organized, well-reasoned, and well-supported arguments via the spoken and written word.

Administration**5.3 Contact Hours**

Administration focuses on the dissemination of critical and administrative information and feedback sessions with the faculty and evaluations of students' understanding of the curriculum.

Squadron Officer School Distance Learning Program

Course 00020

Internet Address

<http://www.au.af.mil/au/soc/cgolp/index.htm>

Mission. *Educate, motivate, and mentor captains as current and future Air Force leaders.*

The SOS DL course (Course 20) provides CGOs with leadership skills at appropriate points in their personal and professional development. The SOS nonresident curriculum is based on the institutional competency list (ICL) provided in Air Force Policy Directive (AFPD) 36-26, *Total Force Development*. The ICL clearly delineates those skills necessary for an officer's success. It constitutes a comprehensive set of abilities and knowledge that defines leadership competence. This course of study provides the necessary tools to execute and excel in the daily leadership and management challenges that characterize CGOs' duties.

The course helps experienced CGOs further develop the skills they need to excel in today's world of rapidly accelerating technology and limitless access to information while preparing them to adapt to unforeseeable challenges and future risks. Students are introduced to principles and applications of ethical leadership and are provided opportunities to explore the Air Force core values and discover and apply various decision-making models, including Air Force Smart Operations for the Twenty-first Century (AFSO 21). Additionally, they develop tools to create a positive environment for building and leading effective teams and coalitions and examining the stages that development teams encounter en route to mission success. The course was specifically designed for junior Air Force officers as they begin taking on increased responsibilities.

The course is offered online via the Blackboard® Learning Management System and features web-based instruction that facilitates rapid courseware delivery anywhere and at any time. The courseware contains multimedia and interactive exercises

to stimulate critical thinking and achieve desired learning levels. Students achieve lesson objectives online and via self-study and then take electronic course exams at designated education offices or other sanctioned testing sites where they receive immediate feedback on their performance.

Curriculum. The SOS DL course presents content similar but not identical to the resident curriculum. Course 20 develops CGOs' skills aligned with the Air Force ICL subcompetencies of "ethical leadership," "develops and inspires others," "builds teams and coalitions," and "decision making." It focuses on developing critical-thinking skills through the application of principles acquired from reading a series of practical on-the-job assignments. The lessons include instruction, practice, and feedback in the thoughtful use of information to guide others, both individually and in groups, toward mission accomplishment.

Learning Outcomes

- Comprehend ethics, core values, and leadership model influences on company grade officer development.
- Know the leadership process.
- Know the concept of accountability in the military.
- Comprehend the associations between professional and personal lives of leaders and subordinates.
- Know decision-making concepts in the USAF environment.
- Comprehend differences between various decision-making approaches used in the USAF environment.
- Comprehend differences between other military services and cultures during the decision-making process.
- Know how risk and uncertainty factors relate to the decision-making process.
- Comprehend how metrics are incorporated in the USAF decision-making process.
- Know leadership approaches to building effective teams.

- Comprehend issues influencing group and team effectiveness.
- Comprehend differences between values and cultures at the individual and institutional levels.
- Comprehend the importance of developing networks at the leadership level.

Faculty. SOS DL faculty members are experienced SOS or ASBC instructors who have successfully completed MSOC002, Advanced Principles of Instructional Design.

Duration. Students must complete the entire program within 18 months from their enrollment dates.

Eligibility. US armed forces officers selected for the grade of captain (O-3) or above are eligible for enrollment into the SOS DL course. Additionally, officers of the Civil Air Patrol selected for captain and above and federal civilian employees in the grades of GS-9, WG-10, WL-9, and WS-8 (or NSPS equivalent) and above are eligible. Under normal circumstances, students must complete the entire program within 18 months.

Reference the Directorate of Education Logistics and Communications (A4/6) catalog (<http://www.au.af.mil/au/afiadl/main.htm>) for more information. ETCA course number: PROGRAM 00028.

Completion Requirements. Complete all requirements as outlined in the course syllabus.

Curriculum Summary

PROGRAM 00028 Curriculum Areas	Contact Hours
00020A Ethical Leadership	42
00020B Decision Making	51
00020C Builds Teams and Coalitions	45
Total	138

Core Curriculum Area Descriptions

Ethical Leadership

42 Contact Hours

This unit examines personal and Air Force core values and develops the trust and commitment of others, personal accountability, and ability to maintain checks and balances. It enables students to practice acting in accordance with the high standards of the Air Force and to recognize the positive effect of such behavior on coworkers.

Decision Making

51 Contact Hours

This unit focuses on using proven processes to make effective and timely decisions. Its use includes processing data/information from multiple streams and utilizing it to influence decisions, relying on analytic methods in all decision making, understanding interdependencies and interoperability across all associated forces, analyzing situations critically to anticipate second- and third-order effects, and establishing metrics to evaluate results and implement feedback.

Builds Teams and Coalitions

45 Contact Hours

This unit establishes alliances, assembles a team, fosters cohesiveness of a team, attends to the diverse interests of team members, and ultimately expands networks and alliances at all levels.

Leadership Development Program

Internet Address

<http://www.au.af.mil/au/soc/cgolp/index.htm>

Mission. *Provide opportunities to enhance the leadership development of USAF officers through timely and relevant education.*

The Squadron Officer College (SOC) Leadership Development Program (LDP) is a series of online courses that greatly expands officer opportunities for leadership development. Joining the

Squadron Officer School (SOS) Distance Learning (DL) course, these additional courses provide for more than 30,000 Air Force captains and lieutenants a graduate-level developmental opportunity tailored to their specific needs that they can complete at their own pace. These courses capture best practices from Air Force operations and the field of leadership as well as advances in online curriculum delivery. Course content focuses primarily on the professional officer competencies defined in AFPD 36-26, *Total Force Development*.

These new courses leverage the Blackboard® Learning Management System to deliver updated content and multimedia learning experiences and introduce engaging, scenario-based assessments to students worldwide. These courses help CGOs further develop the skills needed to excel in today's world of rapidly accelerating technology and limitless access to information, while preparing them to adapt to unforeseeable challenges and future risks.

The four self-paced courses are designed so each can be completed within six months of enrollment. Students successfully finishing a self-paced course will receive a professional continuing education (PCE) credit that is reflected in their official AU educational transcripts.

Curriculum. The LDP presents continuing education designed to fit into the experiences of an officer's career. Each course provides detailed investigation into the dynamics of officership, flight leadership, deployments, and staffing a larger organization. The courses focus on developing critical-thinking skills and the ability to apply principles acquired in the readings to on-the-job assignments. The lessons include instruction, practice, and feedback in the thoughtful use of information to guide others, both individually and in groups, toward mission accomplishment.

Learning Outcomes

- Comprehend ethics, core values, and leadership model influences on company grade officer development.
- Know the leadership process.

- Know the concept of accountability in the military.
- Comprehend the associations between professional and personal lives of leaders and subordinates.
- Know decision-making concepts in the USAF environment.
- Comprehend differences between various decision-making approaches used in the USAF environment.
- Comprehend differences between other military services and cultures during the decision-making process.
- Know how risk and uncertainty factors relate to the decision-making process.
- Comprehend how metrics are incorporated in the USAF decision-making process.
- Know leadership approaches to building effective teams.
- Comprehend issues influencing group and team effectiveness.
- Comprehend differences between values and cultures at the individual and institutional levels.
- Comprehend the importance of developing networks at the leadership level.

Faculty. LDP faculty members are experienced SOS or ASBC instructors who have successfully completed MSOC002, Advanced Principles of Instructional Design.

Duration. While each course must be completed within six months of enrollment, students can complete the courses more quickly, depending upon the time they can invest and their personal developmental needs.

Eligibility. The LDP courses are open to all officers. Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA Course numbers: MLDP01, MLDP02, MLDP03, MLDP04.

Completion Requirement. Complete all requirements as outlined in the course syllabus.

Curriculum Summary

Curriculum Areas	Contact Hours
MLDP01 Officer Development (PDS Code L09)	117
MLDP02 Expeditionary Leadership (PDS Code L19)	132
MLDP03 Flight Commander (PDS Code L10)	126
MLDP04 Organizational Leadership (PDS Code L21)	117
Total	492

Course Descriptions

MLDP01 Officer Development 117 Contact Hours

Through this course, students develop broad perspectives of current issues and associated tools aimed at enhancing professional competence beyond individual specialties: increase their value to their units by understanding and being able to apply interoperability; develop skills necessary to lead, follow, and manage; and become better “Wingmen,” caring for peers and subordinates alike.

MLDP02 Expeditionary Leadership 132 Contact Hours

This course provides an understanding of regional factors that affect national foreign policy and explores global, regional, and cultural issues associated with participating in joint and coalition operations. It stresses the importance of cultural awareness and intercultural competence when dealing with the peoples of regions likely to require US military assistance. The course also examines deployment-specific leadership issues focusing on warrior ethos, including mental and physical preparation, military bearing, and self-discipline. Air Force Institutional Competencies addressed: warrior ethos; global, regional, and cultural awareness.

MLDP03 Flight Commander 126 Contact Hours

This course enhances the abilities to inspire, develop, and care for diverse groups of individuals while leading them to ac-

comply with the mission. The course explores a variety of topics including building leaders, motivation, force development, mentoring, organizational design and decision making, power and authority, morality and ethics, leading change, organizational culture, and communication in the context of the roles, responsibilities, knowledge, skills, and attitudes expected of leaders. Air Force Institutional Competency List sub-competencies: Develops and Inspires Others, Takes Care of People, and Diversity.

MLDP04 Organizational Leadership 117 Contact Hours

This course addresses management skills necessary for officers to support and lead continuous improvement in complex institutional structures. It enhances officers' abilities to deal with complex communication patterns as well as human resource issues that affect mission capabilities while using appropriate methods to identify opportunities, implement viable solutions, and measure the impact of outcomes. Further, the course presents academic leadership models that assist officers in analyzing their own organizations. Air Force Institutional Competency List sub-competencies: Resource Stewardship, Change Management, and Continuous Improvement.

International Officer School

Resident Program

Internet Address

<http://www.au.af.mil/au/spaatz/>

Mission. *Prepare international officers for resident PME; support international students attending AU courses; and execute Air University's International Affairs Program.*

The International Officer School (IOS) was established in 1954 as the Allied Officer Preparatory School. Since then, more than 10,800 international military students (IMS) from 143 countries have completed the program. The preparatory courses improve students' abilities to express ideas clearly (as speakers and writ-

ers) and to read and comprehend written and spoken materials used in Air University (AU) classes. A program of planned classroom activities, field-studies trips, and a local community sponsorship program (Alabama Goodwill Ambassadors [AGA]) introduces students to the political, military, and socio-economic aspects of American culture. This orientation enables students to adjust more readily to the USAF and civilian communities. Academic requirements for each course are geared specifically to the PME schools in which the students enroll.

The IOS Administration Division (DA) functions as the International Military Student Office and provides administrative support to international students attending any AU school. The Education Division (DE) plans, develops, and implements course curriculum and instruction.

Curriculum. The school's curriculum consists of preparatory courses that have three basic functions. First, they provide curriculum orientation to follow-on PME school topics and methodologies. Second, they serve as periods of cultural adjustment for the IMSs and their dependents. Third, they accomplish the administrative requirements and Field-Studies Program objectives outlined in international military training management directives. Attendance at IOS is a prerequisite for IMSs enrolling at SOS, ACSC, and AWC.

Learning Outcomes. Learning outcomes expand the capacity of international officers to participate more effectively in professional military education (PME) and duty assignments. The three IOS preparatory courses provide IMSs an

- appreciation of American society, institutions, and ideals;
- awareness of the mission and organization of US military forces and US military terminology;
- ability to write, speak, and understand American English;
- awareness of the organizational structure, curriculum content, and instructional methods employed in AU PME schools; and
- ability to participate in physical training activities.

Faculty. Qualifications for faculty are determined based on relevant academic credentials, professional functional experience, teaching experience, and teaching abilities. Academic credentials normally include appropriate degrees. Professional experience normally includes depth and breadth of experience in the functional area assigned.

Duration. Each IOS preparatory course is delivered in seven weeks.

Eligibility. The secretary of the Air Force for International Affairs (SAF/IA) invites countries to attend AU PME courses in conjunction with the Air Force Security Assistance Training (AFSAT) organization in coordination with regional combatant commanders. Global security cooperation offices must ensure each IMS is properly vetted in accordance with Defense Security Cooperation Agency (DSCA) and military department guidance. IMSs must also meet minimum English competency levels for their respective course of attendance.

The Squadron Officer School (SOS) and Air Command and Staff College (ACSC) preparatory courses require an English comprehension-level test score of 70, while the Air War College (AWC) preparatory course requires a test score of 80. Students must meet certain physical standards outlined in the Air Force Education and Training Course Announcements (ETCA).

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers: MIOS001, MIOS002, and MIOS003.

Graduation Requirement. Students must meet all academic requirements to graduate.

Curriculum Summary

MIOS001 SOS Preparatory Course	Contact Hours
Administration	17.75
Field-Studies Program	94.25
Communications	91.00
Military Studies	12.00
Leadership	35.00
Total	250.00

Curriculum Summary

MIOS002 ACSC Preparatory Course	Contact Hours
Administration	18.50
Field-Studies Program	97.50
Communications	94.00
Military Studies	19.50
Leadership	6.50
Total	236.00

Curriculum Summary

MIOS003 AWC Preparatory Course	Contact Hours
Administration	27
Field-Studies Program	103
Communications	57
Military Studies	48
Leadership	2
Total	237

Course Descriptions

(Each course includes the following areas.)

Administration. During this course phase, IMSs in-process and receive tours and briefings about Maxwell AFB and the city of Montgomery. They receive orientation in various aspects of the individual IOS courses and programs. This includes welcome and graduation ceremonies, curriculum and schedule briefings, and a tour of the Muir S. Fairchild Research Information Center. Students participate in formal, structured feedback sessions with instructors and informal sessions throughout the courses as needed.

Field-Studies Program. The Field-Studies Program allows students to gain a better understanding of US institutions, ideals, and culture. Some of the topics include the American way of life, US government institutions, education in the United States, and the US news media. A significant portion of this program is devoted to human rights and related training in

keeping with the State and the Defense departments' objectives for security assistance training. Field trips and tours are conducted in the Montgomery area, southeast region, and Washington, DC.

Communications. Communications development constitutes a significant part of the instruction at IOS. It includes English best practices instruction designed to increase the student's ability to speak and understand American English and communicate ideas both orally and in writing.

In addition, basic writing and briefing instruction, with application exercises, is provided based on the follow-on PME school's communication techniques. This area also includes computer instruction with hands-on training in applications appropriate to the specific follow-on PME school.

Military Studies. The Military Studies area introduces students to the mission, organization, policies, concepts, and terminology of the US military.

Leadership. Students are introduced to various leadership theories, concepts, and models; instruction is geared at a level appropriate to the follow-on PME school. This area also introduces the physical training requirements of follow-on PME schools, with emphasis on leadership, followership, problem solving, and team building, particularly important for students preparing to attend SOS.

Other Programs

IOS conducts several nonacademic programs to enhance the cultural experience and academic education of international military students and their dependents.

Alabama Goodwill Ambassadors. AGA is the official AU sponsorship program for IMSs and their families. This program helps to welcome international students and their families. It also acquaints them with aspects of American culture to which they may not otherwise gain exposure through their formal AU courses and activities.

International Family Loan Program. This program lends IMSS and their families (for a nominal fee) such essential household items as dishes and utensils. This service eliminates the need for students to purchase items they would discard before leaving AU.

International Family Orientation Program. This two-week family orientation course is conducted each summer for the dependents of the IMSS attending ACSC and AWC. The course orientates students to American culture and the Montgomery public school system. Recreational activities are also conducted for the children.

Air University International Honor Roll. This honor roll recognizes international graduates of AU PME courses who have become heads of service, ministers of defense, heads of state, or other high-level officials within their own countries.

International Dependents English Course. This six-week course, conducted each fall, provides conversational English skills that adult IMS dependents need in their daily activities. While managed by IOS, the course is taught entirely by volunteers from Maxwell and the local community.

Officer Training School Academic Instructor Course

Internet Address

<http://www.au.af.mil/au/holmcenter/OTS/index.asp>

Mission. *To provide Officer Training School (OTS) instructors the instructor skills needed to develop future officers for the United States Air Force.*

The AIS closed in October 2003. The school's closure moved the staff to different schools in Air University. Five faculty members moved to the Holm Center and created the Instructor Education and Evaluations Branch. The branch is now respon-

sible for the OTS Academic Instructor Course (AIC). The OTS AIC maintains the AIC core curriculum educational foundations, communication skills, instructional methods, evaluation, and instructional design. The curriculum continues to provide student-centered learning experiences that concentrate on applying basic principles of learning to specific learning situations, planning meaningful instruction, using sound teaching methods, communicating effectively, and evaluating the achievement of learning objectives. The lessons are interactive and carefully targeted to the student's needs as a result of adjunct instructor support from the field and increased use of subject matter experts.

Curriculum. The curriculum identifies and measures variables related to such educational processes as content, alternative methods of instruction, instructional resources, and the degree to which stated objectives are achieved at the appropriate instructional level. The curriculum also develops the student's ability to effectively and efficiently address the organization's personnel requirements, unit support, and cadet support processes.

Learning Outcomes. As a graduate of the Holm Center's AIC, the student will be able to conduct the following:

- Plan instruction. The graduate must comprehend the domains of learning related to instructional design, the process of designing level-of-learning lessons, the various methods of teaching, and know the components of the Air Force Instructional System Design (ISD) model.
- Deliver instruction. The graduate must comprehend how to prepare an effective presentation, use questions effectively to promote learning, employ proxemics to enhance the learning environment, and incorporate reflective teaching techniques to improve teaching ability.
- Evaluate instruction. The graduate must comprehend the concept of educational evaluation; the principles and techniques of writing student-centered, multiple-choice, and essay test items as part of the ISD design phase; and the

systematic construction and use of performance evaluation rating instruments.

- Demonstrate instructional competency. The graduate must apply instructional competency through teaching exercises.
- Address unit requirements. The graduate must comprehend the organization's personnel requirements, unit support, and cadet- or student-support processes.

Faculty. The Holm Center employs faculty in both teaching and nonteaching capacities. The faculty combines several years of teaching experience and advanced degrees. Faculty members are selected upon the basis of performance record, experience base, academic achievement, and teaching ability. In addition to numerous teaching responsibilities, the faculty presents at various workshops and is actively involved with professional academic associations throughout the education profession. Therefore, the courses establish a viable development and enrichment program for all faculties.

Duration. The OTS AIC is delivered in 10 academic days.

Eligibility. The course is primarily intended for military and civilian individuals who have been selected to teach at the Officer Training School's BOT, COT, Reserve Commissioned Officer Training (RCOT), or AMS courses.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MOTS004.

Completion Requirement. Students must maintain a "satisfactory performance" evaluation or better to graduate.

Curriculum Summary

Course Number and Title	Contact Hours
MOTS004 OTS Academic Instructor Course	80

Course Description

MOTS004 OTS Academic

Instructor Course

80 Contact Hours

Prepares instructors to teach at OTS. This is a structured, comprehensive, and fast-paced course that requires extensive reading and writing by students to prepare personalized lesson plans. Major curricular areas focus on communication skills, teaching methodologies, cognitive lesson planning, evaluation methodology, and construction of basic instructional aids. This course is designed to maximize opportunities for learning and practicing basic instructor skills. The majority of the course is devoted to small-group activities. Students must plan and present teaching lessons that meet their individual schools' needs. They are encouraged to use their core lesson plans and subject matter to prepare the required lessons.

Officer Training School

Internet Address

<http://www.au.af.mil/au/holmcenter/OTS/index.asp>

Mission. *Produce leaders of character who possess a warrior mind-set, are prepared to lead Airmen, and who embody the Air Force core values of integrity first, service before self, and excellence in all we do.*

The Officer Training School (OTS) is part of the Jeanne M. Holm Center for Officer Accessions and Citizen Development (the Holm Center). The Air Training Command activated the Officer Training School at Lackland AFB on 1 July 1959. OTS moved to the Lackland Training Annex in 1961. In November 1971 the Air Staff launched an extensive curriculum review that produced a core curriculum common to the Air Force Academy, Air Force Reserve Officer Training Corps (AFROTC), and OTS. On 25 September 1993, OTS relocated to Maxwell AFB and began a new era when it became a part of Air Univer-

sity. From inception, OTS has been committed to providing top-quality officers.

Throughout its history, OTS has adapted to a challenging training environment. After graduating 12 women and 78 men in its first class, OTS successfully commissioned more than 500 second lieutenants its first year. By 1964 more than 10,000 individuals had graduated, and to date more than 127,000 officers have entered the Air Force through OTS. Over the years OTS has functioned as a “flexible partner” to the other accessions sources to meet the Air Force’s changing manning requirements. Additionally, the school began to train commissioned medical students, chaplains, and judge advocates in 1981 and medical service officers in 1991. In 1996 the Commissioned Officer Training School combined existing training programs for chaplains, judge advocates, and medical service officers and has trained more than 17,000 newly commissioned officers at the Maxwell-Gunter Annex. Commissioned Officer Training School officially moved to Maxwell AFB in December 2002, and OTS became a centralized training campus.

OTS commissioning and training programs

- instill a commitment to the profession of arms,
- inspire internalization of Air Force core values,
- enhance officership skills,
- provide a relevant, up-to-date curriculum, and
- meet USAF production goals.

OTS consists of three programs: BOT, COT, and the ANG AMS that relocated from McGhee-Tyson ANG Base in 2009. BOT leads to a line officer commission as a second lieutenant for active duty and Reserve personnel. COT provides initial officership training for Air Force judge advocates, chaplains, and medical officers. AMS commissions new second lieutenants heading in to service with the ANG.

OTS conducts training for BOT, COT/RCOT, and AMS at Maxwell AFB. The AEF exercise for these programs is conducted at either the Blue Thunder training site/confidence course located at the north end of the runway at Maxwell AFB or the Vigilant Warrior AEF training site north of Montgomery.

The OTS program is continually assessed with survey data, and course content is reviewed to improve program effectiveness. The OTS complex consists of two academic buildings, four dormitories, a dining facility, fitness center, and parade field.

OTS makes every effort to furnish incoming officer candidates with information to facilitate their transition to commissioned officer status. The OTS Web page gives prospective trainees access to current information on OTS. The home page also assists students with preparing mentally and physically for OTS.

Curriculum. The major areas of instruction include leadership studies, military training and application, the profession of arms, military studies/international security studies, and communications skills. OTS teaching methods include auditorium lectures, readings, flight-room classes (informal lecture, guided discussion, and case studies), and practical exercises (athletic campaigns, one Leadership Reaction course, and the end-of-course AEF exercise).

Learning Outcomes. As graduates of the Holm Center's commissioning education program, students will be able to do the following:

- Comprehend the roles and responsibilities of an Air Force officer.
- Comprehend the Air Force human relations programs such as equal opportunity and treatment.
- Comprehend the principles and benefits of proper physical conditioning, nutrition, and lifetime wellness.
- Effectively apply leadership skills.
- Effectively apply followership skills.
- Comprehend the importance of adherence to Air Force core values.
- Effectively apply ideas verbally in a military setting.

- Effectively apply ideas in writing using military writing formats.
- Know the role of air and space power in maintaining national security.
- Know the role of joint operations in US national security.
- Comprehend the principles of cross-cultural communications.

Faculty. Before assuming leadership of a flight, each flight commander must attend and be certified through the OTS Academic Instructor Course. The courses, Initial Qualification Training and Mission Qualification Training, can be found in the Education and Training Course Announcement.

Duration. OTS currently conducts seven BOT classes, six COT classes, two RCOT, and four AMS classes each year. The BOT program is 12–13 weeks long (61 training days); the COT program is four and one-half weeks long (23 training days); the RCOT program is two weeks long (13 training days), plus the correspondence portion; and the AMS program is six weeks long (40 training days). In fiscal year (FY) 2009 BOT graduated 691 students, and COT/RCOT graduated 1,287 students. With the addition of AMS, these numbers are expected to increase to about 2,500 in FY10.

Eligibility. Students attending BOT must have a bachelor's degree, be less than 30 years of age for rated personnel or 35 years of age for all others, and meet minimum physical requirements for becoming an officer. Competition for entry into this program is rigorous. The following tables summarize BOT, COT, RCOT, and AMS curricula.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers: MOTS001, MOTS002, MOTS003, YAMS000.

Completion Requirement. Students must maintain a “satisfactory performance” evaluation or better to graduate.

Basic Officer Training Curriculum Summary

MOTS001 Instructional Areas	Contact Hours
Leadership Studies/Field Leadership	223.50
Communication Skills	41.50
Profession of Arms	78.00
Military Studies/International Studies	111.00
Military Training/Field Training	166.00
Admin/Processing/Testing/Orientation	146.50
Physical Training/Air Force Combatives Program	55.00
Air Force Culture	88.75
Total	910.25

Course Description

MOTS001 Basic Officer Training (24th Training Squadron) 910.25 Contact Hours

This course provides precommissioning training for selected applicants to meet Air Force requirements by career area. It includes communication skills, leadership studies, professional knowledge, defense studies, and military application and training (practical field leadership, physical fitness, and drill and ceremonies). These basic military subjects are essential in developing selected college graduates to take their places as second lieutenants in the Air Force.

BOT is a challenging 61-training-day program that imparts to its active duty and Air Force Reserve graduates the importance of leadership, discipline, attention to detail, and dedication to service. It stresses commitment to the profession of arms and motivates graduates to adhere to the highest standards of integrity, service before self, and excellence in all they do. This challenging environment provides numerous tests for leadership skills through classroom and field-training exercises and operation of the officer trainee and student wing. The capstone event is a five-day, four-night AEF exercise.

Commissioned Officer Training Curriculum Summary

MOTS002 Instructional Area	Contact Hours
Leadership Studies	35.00
Communication Skills	9.00
Profession of Arms	24.00
Military Studies	10.00
Drill and Ceremonies	18.50
Flight Commander Time	27.00
Physical Training	22.00
Air Force Culture	16.50
Assessments	5.25
AEF/Combat Skills	53.75
Administration/In-Processing	46.50
Total	267.50

Course Description

MOTS002 Commissioned Officer Training (23d Training Squadron) 267.50 Contact Hours

COT is an intense 23-day program. It provides the fundamentals of officership and the initial leadership training required for newly commissioned medical, chaplain, and judge advocate Air Force officers (active duty, ANG, and AFRES). It stresses commitment to the profession of arms and motivates graduates to live up to Air Force core values. COT student ranks range from second lieutenant to lieutenant colonel depending on the newly commissioned officers' professional qualifications. A three-day, two-night AEF exercise is the capstone event for COT. Additionally, the Medical Readiness Indoctrination Course is incorporated into the AEF exercise for medical service officers.

This course provides training in basic military subjects essential in developing directly commissioned officers to serve in the US Air Force. It provides postcommissioning training for officers in the US Air Force medical services (Medical Corps, Dental Corps, Nurse Corps, Medical Service Corps, and Biomedical Science Corps), Judge Advocate Corps (legal), Chaplain Corps, AFRES officers selected to participate in the Air Force Health

Professions Scholarship Program (HPSP), and those enrolled in the Uniformed Services University of the Health Sciences (USUHS). This training is also provided for those officers selected to serve in the AFRES and ANG. Training includes, but is not limited to, instruction in four major areas: profession of arms, military and international security studies, leadership studies, and communication skills. The profession of arms area includes dress and grooming; professional appearance; customs and courtesies; pay, leave, and allowances; and base services. Military and international security studies classes include Air Force heritage, terrorism/force protection, and US policy. Leadership studies classes include leadership and management theory and officership. Leadership instruction is reinforced with practical field-leadership exercises. Communication skills include basic military speaking principles and writing formats. Drill and ceremonies and physical fitness training are also included.

Reserve Commissioned Officer Training (In Residence)

MOTS003 Instructional Area	Contact Hours
Leadership Studies	31.00
Communication Skills	6.00
Profession of Arms	22.00
Military Studies	2.00
Drill and Ceremonies	3.50
Flight Commander Time	4.50
Physical Training	9.00
Air Force Culture	3.00
Assessments	2.00
AEF/Combat Skills	35.00
Administration/In-Processing	14.50
Total	132.50

Course Description

MOTS003 Reserve Commissioned Officer Training (In Residence) 132.50 Contact Hours

The Reserve Commissioned Officer Training (RCOT) course is an abbreviated course designed to train hard-to-recruit ANG

and AFRES medical professionals. It combines distance learning correspondence work and a web-based pretest with a demanding 13-day in-residence course.

This course provides training in basic military subjects essential to developing medical officers in the United States AFRES and ANG. Training includes, but is not limited to, instruction in four major areas: profession of arms, military and international security studies, leadership studies, and communication skills. The profession of arms area includes dress and grooming; professional appearance; customs and courtesies; pay, leave, and allowances; and base services. Military and international security studies classes include Air Force heritage, terrorism/force protection, and US policy. Leadership studies classes include leadership and management theory and officer-ship. Leadership instruction is reinforced with practical field-leadership exercises. Communication skills include basic military speaking principles and writing formats.

Academy of Military Science Curriculum Summary

YAMS000 Instructional Areas	Contact Hours
Leadership Studies	44
Communication Skills	18
Profession of Arms	24
Military Studies	15
Military Training and Application	112
Admin/Processing/Testing/Orientation	22
Electives	95
Physical Training	20
Total	350

Course Description

**YAMS000 Academy of Military
Science (ANG Readiness Center
Detachment 12)**

350 Contact Hours

The Academy of Military Science (AMS) provides precommissioning training for selected applicants to meet Air National Guard requirements by career area. It provides instruction in

basic military subjects essential in developing selected college graduates to take their places as second lieutenants in the Air Force with both state and federal responsibilities. The course includes communication skills, leadership studies, professional knowledge, defense studies, and military application and training (practical field leadership, physical fitness, and drill and ceremonies). Although operationally assigned to OTS, AMS is not an AU course; assignment to classes is managed by the ANG.

AMS is a challenging 40-training-day program that imparts to its ANG graduates the importance of leadership, discipline, attention to detail, and dedication to service. It stresses commitment to the profession of arms and motivates graduates to adhere to the highest standards of integrity, service before self, and excellence in all they do. Students are also provided education in ANG heritage and their role as “citizen Airmen,” as the majority of AMS students are traditional Guard members who also have civilian careers. This challenging environment provides numerous tests for leadership skills through classroom and field training exercises and operation of the officer trainee and student wing. The capstone event is a three-day, two-night AEF exercise.

Civilian Acculturation and Leadership Training

Internet Address

<http://www.au.af.mil/au/holmcenter/CALT/index.asp>

Mission. *To introduce newly hired, non-prior Air Force civilian employees to the Air Force culture and way of life and prepare them for future leadership, managerial, and supervisory roles.*

The goal of the CALT curriculum is to introduce Air Force civilians to the Air Force culture and prepare them for future leadership in managerial and supervisory roles. Patterned after the Officer Training School (OTS) curriculum, the CALT provides a unique in-residence experience focused on AF culture,

missions, and the significant role leaders play in the Air Force's overall success. The curriculum parallels the leadership modules taught at OTS and includes team-building exercises, some outdoor activities, simulation exercises, and time for personal health and wellness to help maintain a level of physical fitness. This is an intensive leadership development program and entails outside reading and projects.

Curriculum. The major areas of instruction include leadership studies, the profession of arms, military studies, and communications skills. CALT teaching methods include auditorium lectures, readings, flight-room classes (informal lecture, guided discussion, and case studies), and practical exercises to include numerous problem-solving activities and war gaming.

Learning Outcomes. Graduates of the Holm Center's CALT program will

- better understand the overall Air Force mission,
- better comprehend the roles and responsibilities of an Air Force leader,
- be able to apply leadership fundamentals and skills necessary to accomplish the mission at the tactical level, and
- be a motivated professional who willingly seeks additional levels of professional military education to further enhance their careers.

Faculty. CALT faculty consists of military and civilian instructors. Civilian faculty members are carefully selected career employees serving in career-broadening assignments. All CALT faculty members attend instructor training before assuming classroom responsibilities and must complete an extensive faculty certification program where they must satisfactorily demonstrate their teaching skills and content mastery.

Duration. The CALT program is delivered in 10 academic days.

Eligibility. The CALT program accepts applications from Air Force civilians who have 2–5 years of continuous federal service,

have no prior military service, and hold a bachelor's degree. There are eight classes per year with 40 students in each class.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MOTS009.

Completion Requirements. Students must satisfactorily complete performance evaluation and objective written test.

Curriculum Summary

Course MOTS009 Instructional Areas	Contact Hours
Leadership Studies	41
Communication Skills	9
Profession of Arms	17
Military Studies	1
Admin/Processing/Testing/Orientation	8
Physical Training	4
Total	80

**Air Force Junior Reserve
Officer Training Corps
Academic Instructor Course**

Internet

<http://www.afoats.af.mil/AFJROTC>

Mission. *To provide AFJROTC instructors the instructor skills needed to develop citizens of character dedicated to serving their nation and community.*

Air University supports the Air Force Junior Reserve Officer Training Corps (AFJROTC), the Air Force's high school citizenship training program. The Holm Center at Maxwell AFB oversees 884 AFJROTC units on high school campuses worldwide. The program builds better citizens for America.

The Holm Center houses the AFJROTC headquarters. The two branches located within the center include Instructor Manage-

ment and Operations. The Instructor Management Branch recruits, certifies eligibility to teach AFJROTC, monitors performance of AFJROTC instructors, and recommends decertification of AFJROTC instructors as necessary. It provides assistance and authoritative guidance to instructors and school officials, including assistance in the selection and hiring of instructors. Additionally, it processes instructor applications and administers the instructor evaluation system. The Operations Branch provides staff initiatives and policy to implement the air and space science and leadership education curriculum. It ensures the program is conducted pursuant to DOD and Air Force instructions; develops policies and procedures for the day-to-day operation of the program; and establishes standards for unit operations, instructor qualifications, and cadet performance.

AFJROTC educates and trains high school cadets in citizenship; promotes community service; instills responsibility, character, and self-discipline; and provides instruction in air and space fundamentals.

The AIS closed in October 2003. The school's closure disseminated the staff to different schools in Air University. Five faculty members moved to the Holm Center and created the Instructor Education and Evaluations Branch. The branch sponsors the AFJROTC Academic Instructor Course (AIC) and the Instructor Recertification courses. The courses are more customized but maintain the core educational foundations, communication skills, instructional methods, evaluation, and instructional design. The curriculum continues to provide student-centered learning experiences that concentrate on applying basic principles of learning to specific learning situations, planning meaningful instruction, using sound teaching methods, communicating effectively, and evaluating the achievement of learning objectives. The lessons are more interactive and more "show and tell" as a result of adjunct instructor support from the field and increased use of subject matter experts.

Curriculum. The AFJROTC Instructor Course curriculum provides student-centered learning experiences that focus on applying basic principles of learning to specific learning situations, planning meaningful instruction, using sound teaching

methods, communicating effectively, and evaluating the achievement of learning objectives.

The AFJROTC Instructor Recertification Course curriculum is designed to provide in-service training and faculty development to AFJROTC instructors who have been teaching in private, public, and DOD-dependent high schools for at least five years to maintain their teaching credentials and to receive updates on Air Force policy.

These courses are required as determined by Holm Center Instruction (HCI) 36-2201, *Faculty Development and Master Instructor Programs*.

Learning Outcomes. Graduates of AIC must be able to do the following:

- Plan instruction. Graduates must comprehend the domains of learning related to instructional design, the process of designing level-of-learning lessons, and the various methods of teaching. They must know the components of the Air Force ISD model.
- Deliver instruction. Graduates must comprehend how to prepare effective presentations, use questions effectively to promote learning, employ proxemics to enhance the learning environment, and incorporate reflective teaching techniques to improve teaching ability.
- Evaluate instruction. The graduate must comprehend the concept of educational evaluation; techniques of writing student-centered, multiple-choice, and essay test items as part of the ISD design phase; and the systematic construction and use of performance evaluation rating instruments.
- Demonstrate instructional competency. The graduate must apply instructional competency through teaching exercises.
- Address unit requirements. The graduate must comprehend the organization's personnel requirements, unit support, and cadet- or student-support processes.

Faculty. The Holm Center employs faculty in both teaching and nonteaching capacities. The faculty combines several years

worldwide. It is a rigorous, comprehensive, and fast-paced course that requires extensive reading, preparation, and moderate research. Major curricular areas include learning theory, communication skills, teaching methods, lesson planning, and evaluation. Teaching methodologies include formal and informal lecture, guided discussion, teaching interview, and demonstration performance. The course is organized for maximum participation in learning. A majority of class time is devoted to seminar activities. Students plan and present teaching lessons, develop test items, and participate in specialized labs to meet AFJROTC requirements. Students must effectively plan and present teaching lessons. They are urged to use AFJROTC lesson plans to prepare the required teaching lessons. Students also receive AFJROTC instruction in curriculum, professional relations, leadership, counseling, and legal issues and meet with subject matter experts concerning instructional levels. They are introduced to secondary school challenges and concerns. This required course is directed by AFJROTC Instruction (AFJROTCI) 36-2004, *AFJROTC Instructor Management*.

MAFJROTC008 AFJROTC
Instructor Recertification

32 Contact Hours

This course provides in-service training to AFJROTC instructors who have been teaching in private, public, and DOD-dependent high schools for at least five years to maintain their teaching credentials and to receive updates on Air Force policy. Major curricular areas include learning theory, communication skills, teaching methods, and other secondary education challenges and concerns. Students also receive AFJROTC instruction and guidance on curriculum, professional development, operations, instructor management, financial management, individual concerns, the cyber-campus, and the Cadet Inventory Management System. The course provides for maximum participation in learning and sharing of best practices through presentations, computer lab time, and small group cross-feed sessions. This required course is directed by AFJROTCI 36-2004, *AFJROTC Instructor Management*.

Ira C. Eaker Center Academic Instructor Course

Internet Address

<http://www.au.af.mil/au/ecpd>

Mission. *Produce newly assigned faculty to effectively plan, develop, manage, and conduct instruction within the Eaker Center.*

Faculty. Academic Instructor Course (AIC) faculty must possess a bachelor's degree and three or more years experience in civilian or military educational administration, psychology, testing, instruction, or related discipline.

Learning Outcomes.

- Demonstrate an ability to plan and develop lesson objectives, including evaluation instruments.
- Demonstrate an ability to clearly communicate to achieve instructional objectives and manage educational processes.
- Show and prove competence in using essential teaching skills that apply to most instructional situations and evaluate the achievement of learning outcomes.

Curriculum. Prepares faculty to instruct, plan, develop, and manage academic instruction. The curriculum requires extensive reading, writing, and moderate research. Several instructional methods are taught.

Duration. The Eaker Center AIC is delivered in 10 academic days.

Eligibility. Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MCPD001.

Completion Requirement. Students must master concepts and techniques of instruction and course management processes to enhance learning.

Curriculum Summary

Course Number and Title	Contact Hours
MCPD001 Eaker Center Academic Instructor Course	80

Course Description

MCPD001 Eaker Center Academic

Instructor Course

80 Contact Hours

This course prepares faculty to instruct and generally manage instruction. It requires extensive reading and writing and moderate research. Several instructional methods are conducted.

Commanders' Professional Development School

Internet Address

<http://www.au.af.mil/au/ecpd/cpds>

Mission. *Prepare Air Force members for duty as wing and group commanders, directors, and emergency operations center directors and conduct tailored courses to help attendees deal with critical leadership challenges.*

The seven courses conducted by the Commanders' Professional Development School (CPDS) include the USAF Wing Commanders' Seminar, the Mission Support Group Commanders' Course, the Maintenance Group Commanders' Course, the Medical Group Commanders' Course, the Operations Group Commanders' Course, the Senior Materiel Leaders' Course, and the Incident Management Course.

Curriculum. Prepare AF members for duty as wing and group commanders, directors, and emergency operations center directors. The school is intended to help attendees deal with critical leadership and management challenges. The Wing Commanders' Seminar convenes five times each year; the Group Com-

manders' courses convene five times each year; and the Air Force Incident Management Course is offered 15 times a year at Maxwell AFB and 15 times each year at other selected locations.

Learning Outcomes.

- Illustrate updates on critical issues affecting AF members, their people, their mission, and their individual roles and responsibilities.
- Summarize pertinent information on leadership and ethical considerations in the decision-making process.
- Give examples of practical skills that may be used to enhance the immediate effectiveness of new commanders.

Faculty. CPDS faculty members must possess a bachelor's degree (any discipline) and three or more years experience in relevant functional command assignment.

Duration. The Wing Commanders' Seminar is one week duration, and the Group Commanders' courses are two weeks long.

Eligibility. The Air Force Colonels Group determines attendance at the Wing Commanders' Seminar and the Group Commanders' courses. Attendance at the Air Force Incident Management Course is mandatory for USAF personnel designated as emergency operations center (EOC) directors and senior installation fire officials. The course is optional for security forces commanders, operations officers, flight chiefs, command inspector general team chiefs, and installation exercise evaluation team chiefs.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers are listed in the curriculum summary table below.

Completion Requirement. Students must comprehend the major concepts and processes to deal with leadership, management, and command issues.

Curriculum Summary

Course Number and Title	Contact Hours
MLMDC800 USAF Wing Commanders' Seminar	42.00
MLMDC 810 Mission Support Group Commanders' Course	71.50
MLMDC871 Maintenance Group Commanders' Course	70.00
MLMDC872 Medical Group Commanders' Course *	*79.00
MLMDC873 Operations Group Commanders' Course	51.00
MLMDC874 Senior Materiel Leaders' Course**	**68.50
MLMDC813 Incident Management Course	32.00

*The Office of the Surgeon General, US Air Force, designates that the educational activity entitled Medical Group Commanders' Course is awarded 33.25 contact hours of American Medical Association Physician's Recognition Award (AMA PRA) Category 1 credits. This course has received the AMA PRA Activity Approval Code #9050, which states that "this activity has been jointly planned and implemented in accordance with the essential areas and ancillary policies of the Accreditation Council for Continuing Medical Education (ACCME) by the Office of the Surgeon General, US Air Forces, and the Ira C. Eaker Center for Professional Development. The Office of the Surgeon General, US Air Force, is accredited by the ACCME to provide continuing medical education for physicians and takes responsibility for the content, quality, and scientific integrity of this program." This continuing nursing education activity was approved by the Nurse Utilization and Education Branch, Medical Services Officer Management Division, HQ AFPC, an accredited approver for the American Nurses Credentialing Center's Commission on Accreditation. The source is Activity Approval Code #8-008, and the number of contact hours is 35.1.

**SAF/AQXD awards 40 continuous learning points towards ongoing acquisition professional development for the educational activity entitled Senior Materiel Leaders' Course.

Course Descriptions

For CPDS course descriptions and other information, visit the course Web site at the Air Force Portal, Organizational A-Z Index: select "I" and the Ira C. Eaker Center for Professional Development, choose Eaker Center Schools, and then select the Commanders' Professional Development School.

Air Force Human Resource Management School

Internet Address

<http://www.au.af.mil/au/ecpd/hr>

Mission. *Provide world-class continuing education for the development and competence of Air Force personnel.*

The Air Force Human Resource Management School (AFHRMS) was established at Maxwell AFB in 1965 as the Air Force Professional Personnel Management School. In July 1977 the AFHRMS absorbed the former Civilian Personnel School, located at the former Gunter AFB. The Civilian Personnel School, originally established in 1948 at Kelly AFB, Texas, was moved to Gunter in 1957. The AFHRMS is one of only two training facilities devoted to teaching personnel management philosophies, policies, practices, and techniques.

In 1983 the school was renamed the Air Force Professional Manpower and Personnel Management School to reflect more closely the merger of manpower and personnel functions at Headquarters USAF, the Air Force Manpower and Personnel Center (as it was then designated), and MAJCOMs. In 1988 the school expanded the curriculum to address PCE requirements in the Air Force Family Matters Program. In 1993, recognizing the broad range of human resource activities represented in its curriculum, the school adopted its current name.

Curriculum. Provides world-class continuing education for the development and competence of AF personnel in the human resource management field. Courses are conducted from one to five times each year, depending on demand.

Learning Outcomes.

- Summarize the tools to operate and successfully contribute to organizational effectiveness,
- Explain force development as a concept and practice,
- Give examples of professional and personal development, and

- Value distinctive contributions of human resource leaders and managers.

Faculty. The AFHRMS faculty must possess three or more years experience in civilian or military human resource positions.

Duration. Courses vary in length from 4 to 14 academic days.

Eligibility. Requirements for participants vary for each course each year, depending on demand. Students can locate the course requirements on the Air Force Portal by selecting from the Web site AF Organizations: select “I” for the Ira C. Eaker Center, choose Eaker Center Schools, and then select the AF Human Resource Management School.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers are listed in the curriculum summary tables below.

Completion Requirement. Students must comprehend the technical and professional competencies of Air Force personnel management and its application.

Resident Curriculum Summary

Course Number and Title	Contact Hours
MAFHRMS112 Advanced Employee-Management Relations Course	32
MAFHRMS127 Advanced Mediation Course	40
MAFHRMS140 Air Force Sexual Assault Response Coordinator Course	40
MAFHRMS408 Airman and Family Readiness Basic Course	40
MAFHRMS126 Basic Mediation Course	32
MAFHRMS110 Employee-Management Relations Course	28
MAFHRMS118 Equal Opportunity Directors Course	36
MFSS307 Force Support Squadron Airman and Family Services Flight Leadership Course	76
MFSS305 Force Support Squadron Community Services Flight Leadership Course	76
MFSS306 Force Support Squadron Force Development Flight Leadership Course	76

Course Number and Title	Contact Hours
MFSS309 Force Support Squadron Manpower and Personnel Flight Leadership Course	76
MFSS308 Force Support Squadron Sustainment Services Flight Leadership Course	76
MAFHRMS400 Force Support Squadron Leadership Course	76
MFSS275 Force Support Squadron Contingency Course	36
MAFHRMS375 Force Support Squadron Operations Officer Course	36
MAFHRMS119 Labor-Management Relations Course	76
MAFHRMS405 Manpower Staff Officer Course	36
MFSS250 Mortuary Officer Course	38
MFSS255 Mortuary Technician Course	38
MFSS200 Protocol Fundamentals Course	72
MAFHRMS117 Resource Management Course	28

The HQ AETC’s white paper, “On Learning: The Future of Air Force Education and Training,” details how AFHRMS is fulfilling this future educational vision today with its near-continuous update of content, cutting-edge educational technology, knowledge management, continuous learning offerings, and courses designed to incorporate the principles found in precision learning. By incorporating these key principles, the AFHRMS remains current, relevant, and academically credible.

Nonresident Curriculum Summary Web-Based/Blended Courses

Course Number and Title	Contact Hours
MAFHRMS121 Civilian Personnel Management Course	20
MAFHRMS110 Employee-Management Relations Course	40
MFSS175 Force Support Squadron Familiarization Course	8

Course Descriptions

To access AFHRMS course descriptions and other information, visit the course Web site at the Air Force Portal, Organizational A-Z Index: select “I” and the Ira C. Eaker Center for Professional Development, choose Eaker Center Schools, and then select the AF Human Resource Management School.

Defense Financial Management and Comptroller School

Internet Address

<http://www.au.af.mil/au/ecpd/dfmcs>

Mission. *Provide world class executive financial management education for Department of Defense personnel by delivering advanced course work in a joint learning environment.*

In 1966 the assistant secretary of the Air Force for Financial Management (FM) established a joint service task group to study financial management education in the DOD. (The group issued its report, the *Management Education Department of Defense Study*, in March 1967.) In 1968 the Professional Military Comptroller Course (PMCC) was developed in response to the *Management Education Department of Defense Study*. In 1973 financial managers from the Army, Navy, and other DOD agencies began to participate in the PMCC, and the Army and Navy began to assign highly qualified officers to the faculty. A Reserve Forces Comptroller Course (RFCC) was added to meet the needs of DOD reserve comptrollers. Then, in 1977 the PMCC became the DOD Professional Military Comptroller School.

The Professional Military Comptroller School continued to provide the PMCC from 1977 to 2005. In 2005, following a review of emerging financial manager education needs, the PMCC was redesigned, refocused, and renamed the Defense Financial Management and Comptroller School (DFM&CS). The school was simultaneously renamed the Defense Financial Management and Comptroller School. In 2006 the Defense Decision Support Course (DDSC) was created to provide improved decision support in the DOD by focusing on concepts related to understanding decision support and the transformational roles of financial management personnel.

Curriculum. Provide quality joint professional continuing education to DOD financial management personnel. The DFM&CS is held four or five times each year, and the DDSC is held 10 times each year. Four courses are conducted at the DFM&CS,

while the other six are performed at the home station of the unit requesting the course. The RFCC is normally held once each year (RFCC is currently in a nonactive status).

Learning Outcomes.

- Demonstrate the ability to advise senior leaders by using enhanced strategic decision support techniques.
- Apply new techniques and concepts to improve personal leadership and interpersonal skills.
- Explain the impact of organizational relationships on the DOD mission.
- Appreciate the diverse financial management disciplines within DOD. Illustrate contingency operation concepts and their impact on financial management.

Faculty. DFM&CS faculty must possess a master's degree in finance, accounting, or a related academic field and three or more years in financial management or similar experience.

Duration. The DFMC is 20 academic days in length; the DDSC is five academic days; and the RFCC is 10 academic days.

Eligibility. The target grades for the DFMC students are O-4 and above, GS-12 (NSPS equivalent) and above, and E-8 and above. Air Force O-3s in the Financial Management Leadership Program and GS-11s are currently authorized to attend by exception only. The target audience for the DDSC is O-4 and above, GS-13 (NSPS equivalent) and above, and E-8 and above. Students selected for this course should possess a broad knowledge of the DOD FM environment, a strategic perspective, above average critical/creative thinking, and excellent oral and written communication skills.

Students for the RFCC are selected and funded by their respective commands. Attendance is authorized for personnel outside the comptroller career area when the training requirement is assessed against positions and responsibilities in resource and associated fund management. Noncomptroller personnel application packets must include a statement, endorsed

by the major command/agency comptroller, highlighting the benefits of attendance.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers are listed in the curriculum summary table below.

Completion Requirement. Students must complete all testing, writing, speaking, and seminar participation assignments that will demonstrate comprehension of the material and the ability to apply it in a professional environment.

Curriculum Summary

Course Number and Title	Contact Hours
MLMDC503 Defense Financial Management Course	160
MLMDC504 Defense Decision Support Course	35
MLMDC502 Reserve Forces Comptroller Course	80
Total	275

Course Descriptions

To access Defense Financial Management and Comptroller School course descriptions and other information, visit the course Web site at the Air Force Portal, Organizational A-Z Index: select “I” and the Ira C. Eaker Center for Professional Development, choose Eaker Center Schools, and then select the DOD Financial Management and Comptroller School.

USAF Chaplain Corps College

Internet Address

<http://www.usafhc.af.mil>

Mission. *Provide education, training, and resources that promote professional excellence and enhance the free exercise of religion for the USAF family.*

On 1 July 1953 the US Air Force established the Chaplains' Course at Lackland AFB, Texas, and placed it under the officer basic military course. The Chaplains' Course became part of the officer military schools (OMS) in June 1955. The USAF Chaplain School was established in June 1960 based on an Air Force authorization; however, it remained under the OMS.

From 1958 to 1965 judge advocates also reported to the chaplain school for training. In February 1965 the chaplain school became a separate unit and was placed directly under the commandant, Lackland Military Training Center. The USAF Chaplain School was established at Maxwell AFB and assigned to Headquarters Air University on 20 May 1966. The USAF Chaplain Service Institute was activated under the Ira C. Eaker Center for Professional Development on 31 October 1992. Technical training for chaplain assistants was transferred to Maxwell in September 1993 from Keesler AFB, Mississippi, under the Air Force Year of Training initiatives. In 2009 the newly named Air Force Chaplain Corps College (AFCCC) moved to Fort Jackson, South Carolina, in accordance with the base realignment and closure process and collocated with the Army and Navy chaplain schools.

The Chaplain Corps has a rich legacy of supplying resources in support of the ministry through the USAF Chaplain Service Resource Board that was formed in July 1959. In October 2003 the Resource Board was realigned as part of the Office of the USAF Chief of Chaplains, assisting in the plans and programs function as an action office for the Air Staff. Then, as a part of the AFCCC relocation to Fort Jackson, the USAF Chaplain Service Resource Board was realigned with the college as a division and continues to provide robust resources in support of the Chaplain Corps.

Curriculum. The curriculum provides the highest quality professional continuing education (PCE), technical training, and resources to provide spiritual care and advice to leadership. The AFCCC conducts two basic chaplain courses, three intermediate chaplain courses, three wing chaplain courses, and three chaplain assistant apprentice courses each year. It generally offers four PCE courses each year covering topics of interest to the Chaplain Corps.

Learning Outcomes.

- Perform duties and responsibilities commensurate with the roles of chaplains and chaplain assistants.
- Demonstrate how chaplains/chaplain assistants provide for the free exercise of religion.
- Explain Expeditionary Air Force requirements and how to provide for ministry in the readiness environment.
- Leverage teamwork to accomplish the USAF Chaplain Corps College mission.

Faculty. AFCCC faculty members must possess a master's degree in divinity or comparable field and be endorsed by their ecclesiastical body.

Duration. Courses vary in length from 10 to 30 days.

Eligibility. The prerequisites for the Basic Chaplain Course and Chaplain Assistant Apprentice Course are selection for duty as a chaplain or chaplain assistant. Chaplains must complete Commissioned Officer Training before attending the Basic Chaplain Course. Other courses are pulse-point and just-in-time training to meet the needs of the Chaplain Corps.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course numbers are listed in the curriculum summary table below.

Completion Requirement. Students must give evidence of mastery of chaplain concepts and processes utilized in the accomplishment of ministry within the USAF.

Curriculum Summary

Course Number and Title	Contact Hours
MAFCSI117 Chaplain Candidate Course	80.00
MAFCSI101 Basic Chaplain Course	240.00
MAFCSI114 Intermediate Chaplain Course	80.00
MAFCSI115 Wing Chaplain Course	80.00
M3ALR5R031 OC3A Chaplain Assistant Apprentice Course	238.50
M6ACL5R071 OC7A Chaplain Assistant Craftsman Course	107.00
Total	825.50

Course Descriptions

For AFCCC course descriptions and other information, visit the course Web site at the Air Force Portal, Organizational A-Z Index: select “I” and the Ira C. Eaker Center for Professional Development, choose Eaker Center Schools, and then select the USAF Chaplain Corps College.

National Security Space Institute

Internet Address

<https://www2.peterson.af.mil/nssi>

Mission. *The Academic Center of Excellence providing responsive space professional continuing education.*

In October 2009 the National Security Space Institute (NSSI) was aligned under the Ira C. Eaker Center for Professional Development, Maxwell AFB. However, it continues to operate in Colorado Springs, Colorado. The institute plays a vital role in the Space Professional Development Program (SPDP). The elements of this program are formalized through a three-level certification process to create and manage a knowledgeable com-

munity of credentialed space professionals (CSP) to meet the nation's space needs and national security objectives. The cornerstone of SPDP is the space education continuum—Space 100, 200, and 300. The NSSI executes the Space 200 and 300 courses that are required in this program for certification levels 2 and 3, respectively.

Curriculum. Students learn about DOD, civil, commercial, foreign, and national space systems. The focus is on space strategy, strategic space power employment, and space system acquisitions. Space 200 is held 17 times a year, and Space 300 is held 13 times a year.

Learning Outcomes. Upon completion of the Space Professional Continuing Education curriculum (Space 200 and 300), students will be able to do the following:

- Provide expertise on and advocate for national-level, agency, DOD, and service space-related policy, strategy, doctrine, operations, acquisition, and international and domestic law, enabling senior military and government leaders to make informed decisions.
- Critically analyze key operational and acquisition events in a space system's lifetime and their respective interactions with the operator, user, and acquirer, enabling senior military and government leaders to make informed decisions supporting national security objectives.
- Provide space operations and acquisition expertise at the strategic and operational levels, enabling the best integrated space support to the war fighter.
- Participate in crisis action planning and joint operations using knowledge of national-level and DOD guidance, functional concepts, law, policy, joint doctrine, and the Joint Operations Planning and Execution System (JOPES), enabling the best integrated space support to the war fighter.

Faculty. The NSSI faculty is made up of carefully selected civilians and military personnel. It is highly desired that faculty

possess a graduate degree and five or more years of experience in space-related operational duties.

Duration. Space 200 is 18 class days; Space 300 is 15 class days.

Eligibility. The Space Professional Management Office, located at Headquarters Air Force Space Command, generates the list of eligible candidates for Space 200 and Space 300. Space 200 students must possess SPDP Certification Level-1 and have a minimum of 24 months of space experience. Space 200 targets space professionals with 8–11 years of service. Space 300 students must possess SPDP Certification Level-2 and have a minimum of 72 months of space experience. Space 300 targets space professionals with 13–18 years of service.

Completion Requirement. Students must demonstrate the ability to critically analyze, articulate, and apply significant developments and trends pertinent to the operational and strategic study of national security space.

Curriculum Summary

Course Number and Title	Contact Hours
MSPACE200 Space 200	144
MSPACE300 Space 300	120
Total	264

Course Descriptions

Space 200. This course is a critical element of the Air Force’s SPDP. The course prepares students for intermediate-level leadership roles within the military space community and is required to earn SPDP Level 2. The course focuses on space applications and employment in operational and tactical theaters; refreshes and provides greater depth on concepts taught in Space 100; provides an understanding of the design, development, and acquisition of space systems; and explores space asset capabilities, limitations and vulnerabilities, and associated application and employment in joint military operations.

Space 300. This is the NSSI's capstone course for space professional education. This course is designed to reinforce concepts from Space 200 while preparing students for leadership roles with the knowledge and understanding to address issues from a strategic perspective. It also provides a comprehensive background on national security space asset employment and integration into joint military operations. It is a thinker's course, using guided discussion techniques to arm tomorrow's space leaders with the knowledge to solve space problems bearing on national security.

Joint Flag Officer War-fighting Course

Internet Address

<https://afkm.wpafb.af.mil/lemay-jfowc>

Mission. *The course prepares two-star officers of the four services for theater-level combat leadership. It is tailored to provide future theater combatant, service component, and joint task force commanders with a broad perspective of the strategic and operational levels of war.*

The LeMay Center hosts the Joint Flag Officer War-fighting Course (JFOWC) on behalf of the four services. The chiefs of staff of the four branches of the US armed forces own and control the course. They delegate course development and implementation to their executive agents: commandant, Army War College; president, Naval War College; president, Marine Corps University; and commander, Air University.

Curriculum. The course prepares two-star officers of the four services for theater-level combat leadership. It is tailored to provide future theater combatant commanders and service component and joint task force (JTF) commanders with a broad perspective of the strategic and operational levels of war. Instruction for the course comes from senior national-level civil-

ian and military representatives; flag officers serving as combatant commanders; and retired, battle-tested officers. Retired war-fighting generals draw from their combatant and component commander experience to lead a campaign-planning exercise focused in various parts of the world across the continuum of conflict.

Through the study of war fighting, military doctrine, and the application of unified, joint, and combined combat forces, the attendees will be better prepared to respond to crises. JFOWC is a two-week course that is offered twice a year. Each class is limited to 19 general/flag officers and senior executive civilians who represent the military services.

Learning Outcomes. As directed by Chairman, Joint Chiefs of Staff Instruction (CJCSI) 1800-01C, *Officer Professional Military Education Policy*, Annex E, Appendix M.

Faculty. Instruction for the course comes from senior national-level civilians and military representatives; flag officers serving as combatant commanders; and retired, battle-tested officers.

Duration. The JFOWC is delivered in 10 academic days.

Eligibility. Per CJSCI 1800-01C, Annex E, Appendix M, and a memorandum of understanding (MOU) between the four executive agents (2006), attendees will normally consist of 18 general/flag officers in the rank of major general/rear admiral-upper half or brigadier general (promotable)/rear admiral-lower half (promotable) at least a year after their attendance at Capstone.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MAAFNJ007.

Completion Requirement. Students must successfully complete all pass/fail evaluations and exercises.

Curriculum Summary

MAAFNJ007 Learning* Areas	Contact Hours
National Security Strategy	8.50
National Planning Systems and Processes	10.00
National Defense Strategy	11.50
National Military Strategy and Organization	8.00
Theater Strategy and Campaigning	27.75
The Role of Strategic Communication in Twenty-first-Century Warfare	7.00
Strategic Leader Development	12.25
Total	85.00

*CSJCI 1800-01C uses the term *learning area* vice *curriculum area*.

Learning Area Descriptions

National Security Strategy

8.50 Contact Hours

- Role of Congress in military affairs and how Congress views the military
- Role of military leaders in developing national political objectives
- Four elements of national power and how the elements are used during a crisis
- Relationship between the strategic and military end states and how they differ and influence stability operations and redeployment

National Planning Systems and Processes

10 Contact Hours

- Role of joint doctrine as it applies to operations planning, mobilization, deployment, employment, sustainment, and redeployment
- Effect of time, coordination, policy, politics, doctrine, and national power on the planning process
- Joint strategy development and operational planning process

National Defense Strategy**11.50 Contact Hours**

- How the military operationalizes the national defense strategy to address strategic challenges by setting priorities among competing capabilities
- How the military dissuades potential adversaries from adopting threatening capabilities, methods, and ambitions, particularly by sustaining and developing US key military advantages

**National Military Strategy
and Organization****8 Contact Hours**

- Combatant commander's perspective and the role of subordinate commanders in developing, deploying, employing, and sustaining military forces
- Roles, relationships, and functions of the president, secretary of defense, chairman of the Joint Chiefs of Staff, Joint Chiefs of Staff combatant commanders, secretaries of the military departments, and the service chiefs as related to the national military strategy

Theater Strategy and Campaigning 27.75 Contact Hours

- Role of the unified commander in developing theater plans, policies, and strategy
- Complexities of interagency coordination and support in campaign planning and execution of military operations
- Challenges and opportunities that may accrue from the combatant commander's regional focus and an ambassador's country focus
- Multinational campaign plan for a geographic combatant commander in support of national and coalition objectives

**The Role of Strategic Communication
in Twenty-first Century Warfare****7 Contact Hours**

- Describe how theater commanders, component commanders, or JTF commanders access information opera-

tions resources and develop responsive information operations plans

- Comprehend the impact of national agencies that support the theater commander's requirements for information operations on national security issues
- Evaluate how the joint operational planning and execution system is integrated into both theater and operational information operations campaign planning and execution to support theater and national strategic sustainment and war-fighting efforts
- Comprehend the importance of strategic communication in a multinational environment and the impact it has in shaping the information environment
- Evaluate how public diplomacy and public affairs are integrated in theater and operational information operations planning and execution to support theater and national strategic sustainment and war-fighting efforts

Strategic Leader Development

12.25 Contact Hours

- Challenges of command at the three- and four-star levels
- Leadership challenges in a coalition environment
- Leadership challenges in working with and understanding the cultures of other members of the interagency

Joint Force Air Component Commander Course

Internet Address

<https://afkm.wpafb.af.mil/lemay-cjface>

Mission. *The Joint Force Air Component Commander (JFACC) Course is a senior officer-level PCE course designed to prepare one-, two-, and three-star officers of the four services for theater-level combat leadership. It is tailored to provide future functional*

component commanders with a broad perspective of the operational and strategic levels of war.

The LeMay Center hosts the JFACC Course on behalf of the four services. The chiefs of staff of the four branches of the US armed forces own and control the course. They delegate course development and implementation to their executive agents: commandant, Army War College; president, Naval War College; president, Marine Corps University; and commander, Air University.

Curriculum. The course prepares one-, two-, and three-star officers of all four services for component command leadership. Attendees study war fighting, military doctrine, and application of unified, joint, and combined combat forces so they will be better prepared to respond to crises as functional component commanders.

The course is conducted annually during December at Maxwell AFB. When practical, students travel to a major exercise, such as Blue Flag, for the final two days. If a major exercise is unavailable, students may visit an air and space operations center (AOC). The course is limited to 18 active duty (includes Reserve and National Guard) one-, two-, and three-star attendees; one-star selects are permitted by exception. The desired attendee mix is nine US Air Force, four US Navy, three US Marine, and two US Army flag officers.

Learning Outcomes. As directed by CJCSI 1800-01C, *Officer Professional Military Education Policy*, Annex E, Appendix L.

Faculty. Instruction for the course comes from senior national-level civilians and military representatives, flag officers serving as combatant commanders, and retired, battle-tested officers.

Duration. The JFACC is delivered in seven academic days.

Eligibility. Per CJCSI 1800-01C, Annex E, Appendix L, attendees should be at least a one-star flag officer (one-star selects may attend on a case-by-case basis). Since these courses build on knowledge from the National Defense University's

(NDU) Capstone Course, attendees should complete this congressionally mandated course before attending a component commander course.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MCADRE004.

Completion Requirement. Students must successfully complete all pass/fail evaluations and exercises.

Curriculum Summary

MCADRE004 Learning* Areas	Contact Hours
National Security Strategy	7.25
National Planning Systems and Processes	10.00
National Military Strategy and Organization	9.25
Theater Strategy and Campaigning	17.25
Information Operations	4.25
The Role of Technology in Twenty-first-Century Warfare	5.00
Strategic Leader Development	7.00
Total	60.00

*CSJCI 1800-01C uses the term *learning area* vice *curriculum area*.

Learning Area Descriptions

National Security Strategy **7.25 Contact Hours**

- Relationship between political and military objectives and how the relationship may enhance or inhibit the combatant commander in reaching his or her theater military objectives

National Planning Systems and Processes **10 Contact Hours**

- Joint and service doctrine applicable to the planning and execution of operations in support of theater-level plans and operations
- How time, coordination, policy, politics, doctrine, and national power affect the planning process

- Joint strategy development and operational planning processes

National Military Strategy and Organization

9.25 Contact Hours

- Combatant commander's perspective and the role of subordinate commanders developing, deploying, employing, and sustaining military forces
- Roles and functions of the component commander to include relationships with and perspectives of the combatant commander, combined/joint force commanders (C/JFC), and component commanders (both functional and service)

Theater Strategy and Campaigning 17.25 Contact Hours

- Role of the unified commander in developing theater plans, policies, and strategy
- Theater-level strategy development and the development of military objectives, end states, and joint concepts of operations
- Theater component strategy that supports the C/JFC campaign plan
- Roles of joint doctrine as they apply to operations planning, mobilization, deployment, employment, assessment, sustainment, and redeployment
- Issues related to component functioning (i.e., air defense, airspace coordination, theater missile defense, fire support coordination, targeting, rules of engagement, and joint fires)
- Key components, systems, and processes used to plan, direct, coordinate, control, and assess combined/joint air, land, maritime, and space effects-based operations

Information Operations

4.25 Contact Hours

- How theater commanders, component commanders, or JTF commanders access information operations resources and develop responsive information operations plans

- Historical or ongoing information operations
- Requirements necessary to collect, collate, and disseminate intelligence information
- Strategic communication in a multinational environment and the impact it has in shaping the information environment

The Role of Strategic Communication

in Twenty-first Century Warfare

5 Contact Hours

- Role of joint experimentation, joint exercises, research and development, and emerging organizational concepts with respect to transforming the US military
- Nature of warfare in the information age, to include advanced planning and analysis capabilities

Strategic Leader Development

7 Contact Hours

- Unique challenges of operational command at the three-star level
- Complexities associated with leadership in a coalition environment at the task force, component, and combatant commander levels
- Complexities associated with leadership in an interagency environment at the task force, component, and combatant commander levels

Combined Force Air Component Commander Course

Internet Address

<https://afkm.wpafb.af.mil/lemay-cjface>

Mission. *The Combined Force Air Component Commander (CFACC) course is a senior officer-level PCE course designed to prepare one-, two-, and three-star officers of the four services for theater-level combat leadership. It is tailored to provide future*

functional component commanders with a broad perspective of the operational and strategic levels of war.

The LeMay Center hosts the CFACC course on behalf of the four services. The chiefs of staff of all four branches of the US armed forces own and control the course. They delegate course development and implementation to their executive agents: commandant, Army War College; president, Naval War College; president, Marine Corps University; and commander, Air University.

Curriculum. The course prepares one-, two-, and three-star officers of the four services for component command leadership. Attendees study war fighting, military doctrine, and application of unified, joint, and combined combat forces to be better prepared to respond to crises as functional component commanders.

It is conducted annually during the summer. The course is held at Maxwell AFB. When practical, students travel to a major exercise, such as Blue Flag, for the final two days. If a major exercise is unavailable, students may visit an air and space operations center (AOC). The course is limited to 18 active duty (includes Reserve and National Guard) one-, two-, and three-star attendees; one-star selects are permitted by exception. The desired attendee mix is five US Air Force, two US Navy, two US Marine, one US Army, and eight allied flag officers.

Learning Outcomes. As directed by CJCSI 1800-01C, *Officer Professional Military Education Policy*, Annex E, Appendix L.

Faculty. Instruction for the course comes from senior national-level civilians and military representatives, flag officers serving as combatant commanders, and retired, battle-tested officers.

Duration. The CFACC is delivered in seven academic days.

Eligibility. Per CJSCI 1800-01C, Annex E, Appendix L, attendees should be at least a one-star flag officer (one-star selects may attend on a case-by-case basis). Since these courses build on knowledge from NDU's Capstone course, attendees

should complete this congressionally mandated course before attending a component commander course.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MCADRE007.

Graduation Requirement. Students must successfully complete all pass/fail evaluations and exercises.

Curriculum Summary

MCADRE007 Learning* Area	Contact Hours
National Security Strategy	7.25
National Planning Systems and Processes	10.00
National Military Strategy and Organization	9.25
Theater Strategy and Campaigning	17.25
Information Operations	4.25
The Role of Strategic Communication in Twenty-first Century Warfare	5.00
Strategic Leader Development	7.00
Total	60.00

*CSJCI 1800-01C uses the term *learning area* vice *curriculum area*.

Learning Area Descriptions

National Security Strategy **7.25 Contact Hours**

- Relationship between political and military objectives and how that nexus may enhance or inhibit the combatant commander in reaching theater military objectives

National Planning Systems and Processes **10 Contact Hours**

- Joint and service doctrine applicable to the planning and execution of operations in support of theater-level plans and operations
- How time, coordination, policy, politics, doctrine, and national power affect the planning process

- Joint strategy development and operational planning processes

National Military Strategy and Organization

9.25 Contact Hours

- Combatant commander's perspective and the role of subordinate commanders developing, deploying, employing, and sustaining military forces
- Roles and functions of the component commander to include relationships with and perspectives of the combatant commander, combined/joint force commanders (C/JFC), and component commanders (both functional and service)

Theater Strategy and Campaigning 17.25 Contact Hours

- Role of the unified commander in developing theater plans, policies, and strategy
- Theater-level strategy development and the development of military objectives, end states, and a joint concept of operations
- Theater component strategy that supports the C/JFC campaign plan
- Roles of joint doctrine as they apply to operations planning, mobilization, deployment, employment, assessment, sustainment, and redeployment
- Issues related to component functioning (i.e., air defense, airspace coordination, theater-missile defense, fire support coordination, targeting, rules of engagement, joint fires, etc.)
- Key components, systems, and processes used to plan, direct, coordinate, control, and assess combined/joint air, land, maritime, and space effects-based operations

Information Operations

4.25 Contact Hours

- How theater, component, or JTF commanders access information operations resources and develop responsive information operations plans

- Historical or ongoing information operations
- Requirements necessary to collect, collate, and disseminate intelligence information
- Strategic communication in a multinational environment and the impact it has in shaping the information environment

The Role of Strategic Communication

in Twenty-first Century Warfare

5 Contact Hours

- Role of joint experimentation, joint exercises, research and development, and emerging organizational concepts with respect to transforming the US military
- Nature of warfare in the information age, to include advanced planning and analysis capabilities

Strategic Leader Development

7 Contact Hours

- Unique challenges of operational command at the three-star level
- Complexities associated with leadership in a coalition environment at the task force, component, and combatant commander levels
- Complexities associated with leadership in an interagency environment at the task force, component, and combatant commander levels

Senior Joint Information Operations Applications Course

Internet Address

<https://afkm.wpafb.af.mil/lemay-sjioac>

Mission. *The course prepares selected general/flag officers and senior executive civilians of all services and the DOD to develop information operations into a war-fighting core military competency that will enable combatant commanders to target adver-*

sary decision making while protecting US interests. The course also includes interagency attendees.

The LeMay Center hosts the Senior Joint Information Operations Applications Course (SJIOAC) on behalf of the four services. The chiefs of staff of the four branches of the US armed forces own and control the course. They delegate course development and implementation to their executive agents: commandant, Army War College; president, Naval War College; president, Marine Corps University; and commander, Air University.

Curriculum. This course prepares selected general/flag officers and senior executive civilians of the four services and the DOD to develop information operations into a war-fighting core military competency that will enable combatant commanders to target adversary decision making while protecting US prerogatives. The course also includes interagency attendees. The course is tailored to provide senior leaders with a broad perspective of information operations at the joint theater (operational) and national (strategic) levels of war.

Attendees study war fighting and doctrine as they relate to information operations concepts and principles. Course objectives provide a common framework for understanding and valuing information operations and the necessary law, policies, and procedures that allow planning and integration of information operations into the joint fight; reviewing joint and service doctrine applicable to the planning and execution of information operations; analyzing the means to effectively communicate US government capabilities and intentions as an important method of combating the plans of US adversaries; examining the current and potential role of interagency and nongovernment organizations; demonstrating the integration of information operations into contingency and crisis plans; evaluating the outcomes and lessons; describing information operations tools, illustrating outcomes of their employment, and explaining lessons from their employment; and illustrating the impact the media has upon operations. Attendance is limited to 18 US flag officers in the grade of brigadier general or major general and equivalent members of the Senior Executive Service (SES).

Learning Outcomes. As agreed upon by the four services.

Faculty. Instruction for the course comes from senior national-level civilians and military representatives, flag officers serving as combatant commanders, and retired, battle-tested officers.

Duration. The SJIOAC is delivered in 4.5 academic days.

Eligibility. Attendees will normally consist of 18 general/flag officers in the rank of major general/rear admiral-upper half, brigadier general/rear admiral-lower half, or members of the SES (or similarly ranked civilians). One-star selects may attend on a case-by-case basis.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MCADRE006.

Completion Requirement. Students must successfully complete all pass/fail evaluations and exercises.

Curriculum Summary

MCADRE006 Learning* Area	Contact Hours
The Role of Information and Technology in Twenty-first Century Warfare	3.50
Joint Doctrine for Information Operations	5.00
Information Operations Core Capabilities	5.00
Strategic Communication	2.50
Media Relations	5.00
Public Diplomacy	2.50
Legal & Policy Implications of Information Operations	2.00
Cyber Warfare	7.00
Coalition Perspective	1.25
US STRATCOM Perspective	2.75
Combatant Command Perspective	3.50
Total	40.00

*CJCSI 1800-01C uses the term *learning area* vice *curriculum area*. Although SJIOAC is not yet included in CSJCI 1800-01, the four services agreed on these learning areas to be included in the instruction.

Learning Area Descriptions

The Role of Information and Technology

in Twenty-first Century Warfare

3.50 Contact Hours

- Role of joint experimentation, joint exercises, research and development, and emerging organizational concepts with respect to transforming the US military
- The nature of warfare in the information age
- How theater commanders, component commanders, or JTF commanders access information operations resources and develop responsive information operations plans
- Historical or ongoing information operations
- The requirements necessary to collect, collate, and disseminate intelligence information
- The importance of strategic communication in a multinational environment and the impact it has in shaping the information environment

Joint Doctrine for Information

Operations

5 Contact Hours

- The approach to information operations outlined in Joint Publication (JP) 3-13, *Joint Doctrine for Information Operations*.
- The implications of the joint doctrine for military involvement in interagency and multinational affairs
- The implications of the multinational and nongeographic aspects of information operations
- Service doctrines for information operations and analyze divergences from joint doctrine
- Selected non-US approaches to information operations and their implications for US national security

Information Operations Core Capabilities

5 Contact Hours

- What constitutes psychological operations (PSYOP), its limits and constraints, and how it is integrated into the planning process?
- The relationship between PSYOP and public affairs and the connection of PSYOP force support to public diplomacy. What are the challenges and factors that must be accounted for during planning and execution? In addition, recount examples of when each did or did not work well in concert.
- Planning factors for a military deception (MILDEC)
- Specific examples of MILDEC and their predicted outcomes and actual results
- Implications of the multinational and “nongeographic” aspects of electronic warfare (EW)
- Current and future EW threats (illustrate the threats with specific examples and experiences)
- Computer network operations effectiveness of US adversaries and the current means in countering them (including nonstate actors)
- Threats commanders face before and during operations and, specifically, the “platforms” US forces use to mitigate and negate the threat
- How information assurance enables other war-fighting domains

Strategic Communication

2.50 Contact Hours

- DOD perspective regarding strategic communication
- The near-instantaneous global nature of information and the implication in a multinational environment
- The importance of strategic communication and the coordination, synchronization, and delivery of strategic effects
- How public diplomacy and public affairs are integrated into theater and operational information operations plan-

ning and execution to support theater and national strategic sustainment and war-fighting efforts

- How theater, component, or JTF commanders must optimally leverage their public affairs resources and develop a strategic response
- Specific examples of strategic communication employment: evaluate effectiveness at the strategic, operational, and tactical levels

Media Relations

5 Contact Hours

- Causes of the adversarial relationship that often exists between the press and the military
- The dynamics of strategic communications to numerous audiences (American public, coalition partners, adversaries, and neutrals)
- The impact of various technologies that provide live broadcasts from the battlefield to American living rooms
- Media issues experienced with recent or ongoing operations
- Fundamental conflicts of tactical, operational, and strategic security concerns with the media's view of the public's right to know

Public Diplomacy

2.50 Contact Hours

- Past and current challenges in disseminating coherent messages: How do you ensure that the various organisms of the US government maintain a consistent message and overcome policy and procedural differences?
- Issues of military support to public diplomacy: You must comprehend the challenges of working in an interagency environment and the "corporate culture" differences that exist and must be overcome to develop national synergy
- How public diplomacy and public affairs are integrated into theater and operational information operations planning and execution to support theater and national strategic sustainment and war-fighting efforts

- Identifies recent public diplomacy efforts and gives an assessment of their effectiveness, lessons learned, and efficacy
- Identifies the relationship between political and military objectives and how the relationship may enhance or inhibit the combatant commander or CFC in obtaining theater objectives

Legal and Policy Implications of Information Operations

2 Contact Hours

- Key provisions in standing rules of engagement, policy, statutes, international law, and constitutional law that shape operations
- Case studies in which the employment of information operations assets was affected by legal or policy factors
- Means by which military commanders can prepare to handle legal implications of using information warfare assets

Cyber Warfare

7 Contact Hours

- Attributes and emerging concepts of the future combined/joint force, and how this force incorporates, organizes, plans, prepares, and conducts operations (in cyberspace)
- Advocacy, funding, planning, programming, and budgeting for cyber assets
- National organization (national resources, interagency, DOD, USSTRATCOM, etc.)
- Mutual deterrence strategy in cyber warfare

Coalition Perspective

1.25 Contact Hours

- The complexities associated with leadership in a coalition environment
- Command and control (C2) challenges facing the joint/combined force component commander, including the personalities of external principals (CFC, other component commanders, and international), transitions, and commander's critical information requirements

- Key national authority and rules of engagement issues which could impact the joint/combined component force, including national policies and prerogatives, information sharing, and titles
- Complexities associated with leadership in a coalition environment
- Force structure, major players, and interoperability issues of allied partners
- Allied information operations concept of operations and how their commands obtain information operations capabilities within an AOR

US Strategic Command Perspective 2.75 Contact Hours

- STRATCOM Unified Command Plan mission
- Current issues with synchronization and integration of DOD information operations and the impact on the war fighter
- Current competency constructs and how they may require change to meet domestic threats
- Global and/or transregional nature of the future of US net-centric world
- Processes for providing reach-back capability to combatant commanders

Combatant Command Perspective 3.50 Contact Hours

- Views on the war-fighting value of information operations
- Examples of how information operations strategies are developed both in contingency and crisis planning and the considerations commanders must consider in course of action development
- Examples of information operations asset employment and an evaluation of their effectiveness at the strategic, operational, and tactical levels
- Experiential challenges for the employment of information operations

Contingency Wartime Planning Course

Internet Address

<https://afkm.wpafb.af.mil/lemay-cwpc>

Mission. *Support the combatant commanders with quality Air Force planners by providing the best foundation of knowledge in joint and Air Force contingency planning.*

The LeMay Center hosts the Contingency Wartime Planning Course (CWPC) that educates Airmen in grades E-5 through O-5 in the art and science of contingency war planning. Nearly 700 students complete 10 programmed courses each year.

Curriculum. The course provides a macro view of the contingency and crisis action planning processes from both joint and USAF perspectives. Other topics include unit readiness assessment, mobilization, expeditionary site planning, and command relationships. Students must successfully pass two progress checks to complete the course.

Learning Outcomes.

- Know how the services and other functional areas contribute to contingency planning
- Comprehend the chain of command, authorities, structure, and responsibilities that guide and support joint and Air Force planning
- Comprehend the five major joint/DOD systems and two Air Force systems that support contingency planning
- Comprehend the joint planning process (contingency and crisis action planning) and AF planning at the base level
- Demonstrate joint and AF planning skills through various application exercises

Faculty. The course is instructed by a diverse group of instructors with a wide range of planning experience in logistics, engineering, personnel, or operational specialties.

Duration. The CWPC is delivered in 10 academic days.

Eligibility. CWPC quotas are allocated to each MAJCOM and are available by contacting the respective MAJCOM training manager. AU-funded quotas are not available for ANG, AFRC, and sister-service personnel. Unit-funded quotas are built into each class for these personnel.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MCADRE002.

Completion Requirement. Students must maintain a grade of “B” or better to graduate.

Curriculum Summary

MCADRE002 Curriculum Area	Contact Hours
IP 1000 Orientation	8.00
IP 2000 Foundation for Planning	8.00
IP 3000 Systems	4.50
IP 4000 Planning	12.50
IP 7000 Exercises	24.00
Total	57.00

Course Descriptions

IP 1000 Orientation **8 Contact Hours**

Presents an overview of the Contingency Wartime Planning Course, including course objectives, curriculum, methodology, and faculty introduction. Also provides an overview of legal considerations in planning and information operation integration into the air campaign.

IP 2000 Foundation for Planning**8 Contact Hours**

Provides an overview of key topics that form the foundation of planning and demonstrates how they support and are used in contingency planning. Overview of topics include national security strategy, command relationships, AF doctrine, mobilization, functional area managers, status of resource and training system (SORTS), and designed operational capability statements.

IP 3000 Systems**4.5 Contact Hours**

Introduces key planning-related systems, including the joint strategic planning system, deliberate crisis action planning execution system, war and mobilization plan, joint operation planning and execution system (JOPES), and the planning, programming, and execution system. Describes how those systems are used in the contingency and crisis action planning process.

IP 4000 Planning**12.5 Contact Hours**

Provides an overview of the joint strategic capabilities plan and time-phased force and deployment data (TPFDD) development, JOPES programs, and support and transportation planning. Describes prepositioned war reserve materiel (WRM) assets and how those assets relate to support planning, the structure of a force package, and how the manpower and equipment force packaging system works. Describes the base-level deployment planning process and base support and expeditionary site planning. Explores the concepts of crisis action planning and campaign planning.

IP 7000 Exercises**24 Contact Hours**

Students demonstrate knowledge and comprehension through a series of 10 major exercises. These exercises reinforce understanding of such topics as TPFDDs, TPFDD letters of instruction, force planning for aviation and support forces, SORTS, AEF reporting tools, Expeditionary Site Planning, and AEF posturing and coding. The course concludes with a comprehensive crisis action planning exercise that involves the facets of contingency planning.

Joint Air Operations Planning Course

Internet Address

<https://afkm.wpafb.af.mil/lemay-jaop>

Mission. *Prepare students to serve on the staff of a joint forces air component commander (JFACC) and to educate them in the fundamental concepts, principles, and doctrine required to develop and execute the air portion of a joint/combined campaign plan.*

The LeMay Center hosts the Joint Air Operations Planning Course (JAOPC). Classes are offered eight times each year. Enrollment ranges from 30 to 40 students in each class. Attendees are normally captains through colonels.

Curriculum. Participants gain in-depth familiarity with the fundamental concepts, principles, and doctrine required to develop a joint or combined air operations plan. Students focus on the joint air estimate process at the operational level of war.

Learning Outcome. Develop an effective joint/combined air operations planner.

Faculty. A diverse group of experienced personnel with planning experience in the operational community instruct the course.

Duration. The JAOPC is delivered in 10 academic days.

Eligibility. JAOPC quotas are allocated to each MAJCOM and are available by contacting the respective MAJCOM training manager. AU-funded quotas are not available for ANG, AFRC, and sister-service personnel. Unit-funded quotas are built into each class for these personnel.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MCADRE003.

Completion Requirement. Students must maintain a grade of “B” or better to graduate.

Curriculum Summary

MCADRE003 Curriculum Area	Contact Hours
Block I Basic Joint Air Operations Plan Concepts	15
Block II Joint Air Operations Plan Case Studies	5
Block III Joint Air Estimate Process Development	36
Total	56

Course Descriptions

Block I Basic JAOP Concepts 15 Contact Hours

Block I defines the basic concept related to the joint air operations planning process. It includes intelligence, logistics, weaponizing, and an effect-based approach to operations.

Block II JAOP Case Studies 5 Contact Hours

Block II presents various case studies relative to the joint air operational process followed by student discussion.

Block III Joint Air Estimate Process Development 36 Contact Hours

Block III presents the joint air estimate process, which involves stepping through the six phases related to the process. This block provides students the opportunity to demonstrate what they have learned by using practical exercises.

Information Operations Fundamentals Application Course

Internet Address

<https://afkm.wpafb.af.mil/lemay-iofac>

Mission. *Support the combatant commanders by providing students a broad understanding of information operations.*

The LeMay Center hosts the Information Operations Fundamentals Application Course (IOFAC) that educates students on the fundamental principles of information operations in accordance with AFDD 2-5, *Information Operations*. Classes are offered eight times each year with an enrollment of 30 to 40 students for each class.

Curriculum. The course provides students with a broad understanding of information operations doctrine and insight into how information operations are applied across the full spectrum of conflict from peace to war. The course is taught at the college level through lectures, seminars, practical exercises, readings, and computer-based lessons to help students gain a better understanding of how current and emerging technologies affect decision making.

Students must complete the following for the entire five-day course:

- 33-question multiple-choice survey, conducted at the beginning and end of the course;
- Successful assimilation of course material measured by the difference between the two surveys;
- A post-survey review of the second survey, with question/answer and discussion to ensure 100 percent comprehension of the material presented; and
- Application of material learned during six seminar sessions that consist of videos, guided discussions, and two major exercises: Network Defense and Information Operations. Assessment consists of instructor oversight, guided discussion, question/answer, and demonstration. Performance is scored via computer modeling with expected group rating of 90 percent.
- Information operations exercise success is measured through correct presentation of material and responses to faculty questions.

Learning Outcome. This course helps students to develop an awareness of the application of information operations across the spectrum of conflict.

Faculty. The course is taught by personnel experienced in the information operations realm, including intelligence, communications, and operational specialties.

Duration. The IOFAC is delivered in five academic days.

Eligibility. IOFAC quotas are allocated to each MAJCOM and are available by contacting the respective MAJCOM training manager. AU-funded quotas are not available for ANG, AFRC, and sister-service personnel. Unit-funded quotas are built into each class for these personnel.

Reference the Education and Training Course Announcements (ETCA) Web site at <https://etca.randolph.af.mil> for additional information. ETCA course number: MCADRE005.

Completion Requirement. Students must maintain a grade of “B” or better to graduate.

Curriculum Summary

MCADRE005 Curriculum Area	Contact Hours
Block I Major Components of Information Operations	10
Block II Environmental Factors of Information Operations	10
Block III Applications of Information Operations	15
Total	35

Course Descriptions

Block I Major Components of Information Operations **10 Contact Hours**

Block I defines information operations using AFDD 2-5, *Information Operations*, as its primary reference. It also provides students with an understanding of the components of information operations (IO) and shows how they fit in US Air Force doctrine.

**Block II Environmental Factors of
Information Operations****10 Contact Hours**

Block II presents environmental factors that can influence and affect the conduction of information operations and distills how these elements can be applied across the entire military spectrum.

**Block III Applications of
Information Operations****15 Contact Hours**

Block III presents instruction on current information operations applications and provides students the opportunity to demonstrate what they have learned by using practical exercises.

ACADEMIC SUPPORT

Several organizations at Maxwell AFB provide academic and historical support for the AU resident and distance learning programs. These organizations enable the university to extend essential mission support to a wide range of Air Force units and commands, including Headquarters Air Force and the DOD.

Air University Registrar

Internet Address

<http://www.au.af.mil/au/registrar.asp>

The Air University Registrar oversees three branches: Registrar Services, Registrar Support, and Technology Support. Through its Registrar Services Branch, the registrar provides a 30-year archival data trail for AU schools, produces transcripts for graduates of those schools, and serves as the admissions officer for AWC, ACSC, SAASS, and the USAF TPS master's degree programs. Registrar Services enrolls distance education students and processes admissions for the AU degree programs. This branch also produces course completion certificates, diplomas, and transcripts. Registrar Support manages course requirements, allocations, schedules, and program changes. This branch also supports the Air Force Education Requirements Board through data tracking and analysis for Air Force advanced academic degree programs and professional continuing education requirements. Registrar Support is the "hub" for providing historical and current data on student admissions and enrollments. Technology Support provides assistance for the Air University Registrar Education Program Management System and functions as the single input source for updating Air Force officer records with PME graduate data and developmental education credits. This branch also supports promotion boards by screening graduate records to provide PME graduate and developmental education data.

Directorate of Education Logistics and Communications

Internet Address

<http://www.au.af.mil/au/afiadl/>

Mission. *To develop, deliver, and manage distance learning for US air and cyberspace forces.*

Air University, through its Directorate of Education Logistics and Communication (A4/6), provides educational oversight, administrative services, and academic support for career-related specialties and selected technical programs delivered at a distance. The A4/6 directorate is responsible for the instructional development, management, delivery, and evaluation of Air Force career development courses, specialized courses, and select PME courses. It also produces and distributes study materials for the Air Force Weighted Airman Promotion System (WAPS) and provides administrative support services for AU's nonresident PME and PCE courses. The A4/6 is a comprehensive DL organization accredited by the Distance Education and Training Council since 1975.

Each year this directorate administers approximately 350 courses, 90,000 WAPS packages, and 200,000 examinations, while serving more than 170,000 students. The traditional paper-based DL courses are developed using state-of-the-art publishing software, and examinations are printed using print-on-demand technology. A growing number of courses incorporate a blend of text and multimedia via CD-ROM, and some are available on the Air University online site. Electronic exams, developed by A4/6 instructional specialists, are available at remote test control facilities, enabling students to have instant access to feedback and test scores. Student support is accomplished via the electronic E-Campus Support Center, providing technical, course, and student-support services through electronic incident submissions and frequently asked questions. All A4/6 personnel facilitate the printing of the program, mail-room operations, and warehouse contract for AU; maintain a database of registered students (shared with the AU Registrar/Student Services); track student progress; administer surveys; and provide analytical reports on student performance and satisfaction to the schools and functional communities. Instructional systems specialists and advisors are available to teach subject matter experts and support organizations in the field, utilizing various media to develop sound instructional strategies. The A4/6 produces handbooks and guides for course authors, preparing agencies, base education offices, test-control facilities, and field units.

Curriculum. A description of A4/6's 350 distance learning courses is available in the A4/6 catalog at <http://www.au.af.mil/au/afiadl/>. The Web site also provides information about enrollment, counseling, testing procedures, test-control facilities, methods for obtaining assistance with student inquiries, and links to DL resources and guides.

Air Force Research Institute

Internet Address

<http://www.au.af.mil/au/research/>

Mission. *Conduct independent research, outreach, and engagement to enhance national security and assure the effectiveness of the United States Air Force.*

The Air Force Research Institute (AFRI) was officially activated as an independent, unique organization at AU on 19 May 2008. AFRI supplements Air University's and the United States Air Force's (USAF) idea-generating capacity and supports air, space, and cyberspace research inquiries from the chief of staff to other top-level decision makers throughout the DOD and other facets of the defense industry.

AFRI enhances long-term studies of external agencies, supports student research, and conducts specialized research projects for the Air Staff and the DOD to enhance national security and to provide relevant research for the USAF. AFRI promotes advanced thinking and strategy regarding airpower through publications, conferences, and forums that address current issues vital to the Air Force and also captures lessons from history. AFRI publication products and much of AU's unclassified graduate-level research are available for review either electronically or in print. AFRI comprises three divisions: Research, Outreach, and Engagement.

The Research Division conducts independent operational- and strategic-level research of interest to the Air Force. This research involves the enduring elements of air, space, and cyberspace and their effect on the US military and national se-

curity across the full spectrum of military interests. This is accomplished through annual research requests from the chief of staff of the Air Force, and research topics generated from other USAF and DOD senior leaders concerning some of the most pressing issues facing the US military. In addition, the staff continues research into its areas of special concentration on topics of importance to the USAF. The Research Division generates and publishes books, original studies, research pamphlets, monographs, and papers on topics of interest to AF leaders and those related to current and future air, space, and cyber operations.

The Outreach Division develops and publishes several products in print and electronic formats. The publications include *Strategic Studies Quarterly*, an Air Force-sponsored strategic forum for military, government, and academic professionals. *Strategic Studies Quarterly* publishes articles of interest to USAF and national leaders through the critical examination of and debate about warfare, strategy, national and international security, and defense policy. The *Air & Space Power Journal*, the professional journal of the USAF since 1947, has grown to include six language editions. Its online companion, *Chronicles Online Journal*, provides an additional forum for exchanging ideas about operational-level air, space, and cyber power matters. *The Wright Stuff* is a bi-weekly discussion forum intended to generate thoughtful discussion and debate regarding aspects of national security by highlighting scholarly thought from across the USAF and beyond.

The Outreach Division also includes the Air University Press, which serves as the professional publishing arm of AU. Press publications promote creative thought on, and appreciation for, the value of air, space, and cyber power. The Air University Publication Review Board assists the press in acquiring manuscripts and advising on the academic and research value of potential manuscripts. The press is a leading not-for-profit publisher on air, space, and cyber power doctrine and national security. Information on press publications is available through the *Air University Press Publications* catalog in hard copy, electronically at <http://aupress.maxwell.af.mil>, and on the Air Force Portal.

The Engagement Division extends the reach of AFRI by identifying, developing, and sustaining relationships with other government and academic communities, including universities and think tanks. This effort can also include collaboration with international partners. One path to that end is through hosting, co-hosting, and participating in conferences with various partners to promote the expansion and development of concepts, issues, and topics of interest to Air Force leaders and policy makers.

The Engagement Division also supports Air University research efforts through the annual AU Call for Topics and the AU Research Information System database. The Outreach Division also publishes the annual *AU Research Bulletin*.

Air Force Enlisted Heritage Research Institute

Internet Address

<http://AFEHRI.maxwell.af.mil>

Mission. *Support the Barnes Center for Enlisted Education by educating and motivating enlisted leaders on our enlisted heritage and history.*

The Air Force Enlisted Heritage Research Institute (AFEHRI) was established 23 May 1997 as a component of the Barnes Center. It is comprised of a director, noncommissioned officer in charge of the research and the heritage center, client support administrator, and a curator. The AFEHRI provides curriculum and student support to all facets of EPME and Airman Leadership Schools. It also provides secondary student support to the USAF First Sergeant Academy and USAF Historian Development Course. It captures, preserves, and archives enlisted history and heritage and assists in developing the *Air Force Professional Development Guide*.

The institute is comprised of two elements. The research and archives element consists of a research center, archives storage, and a student computer lab. The heritage center element con-

sists of the Enlisted Heritage Hall with many student-teaching exhibits. It is also a city and state tourist attraction and serves as a military museum to civilian visitors. The AFEHRI preserves the rich and dramatic heritage and tradition of the enlisted corps of the USAF and its antecedents—Aeronautical Division, Army Air Service; Army Air Corps; and Army Air Forces—in the development of airpower to defend the United States. AFEHRI achieves its mission by featuring artifacts, art collections, pictorial exhibits, written and oral documentation, audiovisuals, equipment, and selected aircraft parts. Additionally, students use the in-house and online research capabilities to enhance learning and complete enlisted heritage research projects. A significant archival holding is also available, and efforts are systematically made to ensure its growth and availability to researchers and the public.

Air Force Historical Research Agency

Internet Address

<http://www.afhra.maxwell.af.mil/>

The Air Force Historical Research Agency (AFHRA) is the primary repository for Air Force historical documents. Established in Washington, DC, during World War II, the agency's collection moved to Maxwell AFB in 1949 to support Air University (AU) and is located adjacent to the Muir S. Fairchild Research Information Center (MSFRIC). The AFHRA is a field-operating agency functioning under the policy guidance of the Air Force historian at Headquarters Air Force.

AFHRA's current holdings exceed 700,000 documents and 100 million pages and represent the world's largest and most valuable organized collection of historical documents on US military aviation. Subjects range from the use of balloons in the Civil War through Air Force activities in World War II, Korea, Southeast Asia, Operation Desert Storm, the air war over Serbia, and Operations Noble Eagle, Enduring Freedom, and Iraqi Freedom. The majority of documents consist of USAF organiza-

tional histories from every echelon of the service from major command to squadron level. Except for the classified or restricted documents comprising approximately 25 percent of the holdings, the collection is open to the public. Finding aids include an electronic database and bibliographies for identifying and locating individual documents on specific topics of interest to the researcher.

Complementing the unit histories, the agency houses several special collections, with some dating back to the early 1900s. These collections include historical monographs and studies; almost 2,500 oral history interviews; end-of-tour reports of notable overseas commanders; course materials of the Air Corps Tactical School from the 1930s; and working papers of key Army Air Force staff offices, the British Air Ministry, and the Luftwaffe during World War II. An extensive 2-million-page Persian Gulf War collection and electronic database of nearly 85 gigabytes of information on the air war over Serbia have been added to the agency's holdings in the past decade. The Gulf War holdings include chronologies, working papers, message traffic, oral history transcripts, unit histories, and contingency reports.

The agency also holds the personal paper collections of more than 500 Air Force civilian and military figures, including John L. Brown, George C. Kenney, Curtis E. Lemay, John D. Ryan, and Thomas D. White.

The agency receives historical reports and information from Operations Noble Eagle, Enduring Freedom, and Iraqi Freedom and other Air Force operations. Its historical collection is readily available to AU students, faculty, and staff. In addition, agency staff members provide research and advisory services for AU students to assist them in preparing papers and theses.

Beyond its support to AU, the AFHRA staff answers requests for historical information from Congress, the Joint Chiefs of Staff, the Air Staff, the MAJCOMs, and the general public. Other key functions include drafting and updating the official lineage and honors histories and emblems of the Air Force organizations, writing and publishing historical reference works, conducting the Air Force's oral history program, maintaining records showing the status of aircraft, and updating and pre-

serving the official lists of aerial victory credits earned during each war.

AFHRA staff routinely takes part in training new Air Force historians and conducting biennial archival and oral history training courses for professional members of the Air Force history and museums program. The agency also deploys individual mobilization augmentees to conduct interviews and capture documentation relating to Air Force operations.

Muir S. Fairchild Research Information Center

Internet Address

<http://www.au.af.mil/au/aul/lane.htm>

The Muir S. Fairchild Research Information Center (MSFRIC), founded in 1946 as the AU Library, is the premier library in DOD. It houses well-balanced collections especially strong in the fields of war fighting, aeronautics, Air Force and DOD operations, military sciences, international relations, education, leadership, and management. MSFRIC improves Air Force education by providing access to the world of information through quality library services.

The center holds more than 2.6 million items, including 512,000 military documents, 501,000 monographs and bound periodical volumes, 431,000 maps and charts, and 150,000 military regulations and manuals.

MSFRIC sits at the center of Chennault Circle, Maxwell AFB. On 19 January 2007 Air University Library was redesignated the Muir S. Fairchild Research Information Center. The library building, Fairchild Library, is named for the founder and first commander of AU, Gen Muir Stephen "Santy" Fairchild. The Fairchild Research Information Center also operates the Henry "Red" Erwin Library at Maxwell-Gunter Annex. This branch provides tailored information collections and services for the NCO Academy and the Senior NCO Academy.

An active program of bibliographic publications and indexes facilitates access to the center's holdings and information. Spe-

cial subject bibliographies and curriculum support pages are published throughout the year and posted contemporaneously on the library's web page. Published since 1949, the *Air University Library Index to Military Periodicals* is searchable in the online catalog, accessed through the center's Web site.

Electronic information technologies are critical to the delivery of library resources and services. A third-generation integrated library system automates identifying, locating, and circulating library-owned materials. A robust Web site provides Internet access to the Special Bibliography Series, other PME curriculum-support materials, map and image sites, full-text journals, e-books, newspapers, online databases, and links to key Web sites. Many MSFRIC tools are now available through the Air Force Portal, including links to reference librarians, bringing the personal touch of library service to the entire Air Force community.

MSFRIC is a member of the Association of Southeastern Research Libraries (ASERL), the Military Education Research Library Network (MERLN), the Network of Alabama Academic Libraries (NAAL), and Lyrasis.

AIR UNIVERSITY FACULTY

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ACRONYMS AND ABBREVIATIONS

A4/6	Directorate of Education Logistics and Communication
ACCME	Accreditation Council for Continuing Medical Education
ACE	American Council on Education
ACSC	Air Command and Staff College
ACT	accelerated combat timeline
ACTS	Air Corps Tactical School
AEF	air and space expeditionary force
AETC	Air Education and Training Command
AF	Air Force
AFB	Air Force Base
AFCCC	Air Force Chaplain Corps College
AFDC	Air Force Doctrine Center
AFDD	Air Force Doctrine Document
AFEHRI	Air Force Enlisted Heritage Research Institute
AFEWT	Air Force Educational War-Gaming Toolset
AFHRA	Air Force Historical Research Agency
AFHRMS	Air Force Human Resource Management School
AFI	Air Force Instruction
AFIADL	Air Force Institute for Advanced Distributed Learning
AFIT	Air Force Institute of Technology
AFJROTC	Air Force Junior Reserve Officer Training Corps
AFJROTCI	Air Force Junior Reserve Officer Training Corps Instruction
AFMS	Air Force Medical Service
AFOATS	Air Force Officer Accession and Training Schools
AFPC	Air Force Personnel Center
AFPD	Air Force Policy Directive
AFRC	Air Force Reserve Command
AFRES	Air Force Reserve
AFRI	Air Force Research Institute
AFRICOM	Africa Command
AFROTC	Air Force Reserve Officer Training Corps
AFSAT	Air Force Security Assistance Training

AFSEWPS	Air Force Senior Executive War-fighter Perspective Seminar
AFSNCOA	Air Force Senior Noncommissioned Officer Academy
AFSO 21	Air Force Smart Operations for the Twenty-first Century
AFWI	Air Force War-gaming Institute
AGA	Alabama Goodwill Ambassadors
AIC	Academic Instructor Course
AICE	Association of International Credential Evaluators
ALS	Airman Leadership School
AMA PRA	American Medical Association Physician's Recognition Award
AMS	Academy of Military Science
ANG	Air National Guard
AOC	air and space operations center
AOR	area of responsibility
APID	Advanced Principles of Instructional Design
ARCS	Air Reserve Component Seminar
ARPS	Aerospace Research Pilot School
ASBC	Air and Space Basic Course
ASI	Avionics Systems Integrations
ATO	air tasking order
AU	Air University
AUI	Air University Instruction
AUSIS	Air University Student Information System
AWC	Air War College
AWP	Air Web Planner
BBA	Bachelor of Business Administration
BEAST	Basic Expeditionary Airman Skills Training
BDE	basic developmental education
BOT	Basic Officer Training
BT	Blue Thunder
C2	command and control
C/JAOC	combined/joint air operations center
C/JFACC	combined/joint force air component commander
C/JFC	combined/joint forces command

CADRE	College of Aerospace Doctrine, Research and Education
CALT	Civilian Acculturation and Leadership Training
CAOC	combined air operations center
CAP	Civil Air Patrol
cBT	computer-based testing
CCAF	Community College of the Air Force
CENTCOM	United States Central Command
CEO	chief executive officer
CFACC	combined forces air component commander
CFC	Combined Forces Command
CFP	check flight phase
CGO	company grade officer
CJCSI	Chairman, Joint Chiefs of Staff Instruction
CLC	Chief Master Sergeant Leadership Course
CMSgt	Chief Master Sergeant
CNW	College of Naval Warfare
COIN	counterinsurgency
CONUS	continental United States
COT	Commissioned Officer Training
CPDS	Commanders' Professional Development School
CPI	Continuous Process Improvement
CSAF	chief of staff of the Air Force
CSO	combat systems officers
CSP	credentialed space professional
CWG	Capstone War Game
CWPC	Contingency Wartime Planning Course
DA	administration division
DDS	doctrine development service
DDSC	Defense Decision Support Course
DE	education division
DFMC	Defense Financial Management Course
DFM&CS	Defense Financial Management & Comptroller School
DL	distance learning
DLI	Defense Language Institute
DOD	Department of Defense
DOE	design of experiments
DSCA	Defense Security Cooperation Agency

DSN	Defense Switching Network
EAD	extended active duty
EOC	emergency operations center
EPME	enlisted professional military education
EPMEIC	Enlisted Professional Military Education In- structor Course
ESL	English as a Second Language
ETCA	Education and Training Course Announcements
EW	electronic warfare
FERPA	Federal Family Educational Rights and Privacy Act
FGO	field-grade officers
FM	financial management
FS	Foundations of Strategy
FSA	First Sergeant Academy
FTE	flight-test engineering
FTN	flight-test navigator
FTT	flight-test techniques
GOE	Gathering of Eagles
GPA	grade point average
GS	global security; General Schedule
HAF	Headquarters Air Force
HCI	Holm Center Instruction
HPSP	Health Professions Scholarship Program
HQ	headquarters
iBT	internet-based testing
ICL	institutional competency list
ID	intelligence department
IDE	Intermediate Developmental Education
IDI	Intercultural Development Inventory
IF	International Fellow
IFAST	Integration Facility for Avionics System Testing
ILE/ILE EX	Intermediate-Level Education/Exercise
IMA	individual mobilization augmentee
IMS	international military student

IN	Directorate of Intelligence
IO	information operations; international organizations
IOFAC	Information Operations Fundamentals Applications Course
IOP	instruments of power
IOS	International Officer School
ISD	Instructional Systems Design
ISR	intelligence, surveillance, and reconnaissance
JAEP	joint air estimate process
JAEX	joint air and space exercise
JAOC	joint air operations center
JAOP	joint air operations plan
JAOPC	Joint Air Operations Planning Course
JFACC	joint force air component commander
JFC	joint force commander
JFOWC	Joint Flag Officer War-Fighting Course
JLASS	joint land, aerospace, and sea simulation
JMO	joint military operation
JOPES	joint operations planning and execution system
JP	joint planning; Joint Publication
JPEX	Joint Planning Exercise
JPME	joint professional military education
JSCSC	Joint Services Command and Staff College (United Kingdom)
JSL	joint strategic leadership
JTF	joint task force
LDP	Leadership Development Program
LDS	leadership development simulation
MAAS	Master of Airpower Art and Science (SAASS)
MAJCOM	major command
MERLN	Military Education Research Library Network
MILDEC	military deception
MMOAS	Master of Military Operational Art and Science (ACSC)
MPA	Master of Public Administration
MSS	Master of Strategic Studies (AWC)
MOU	memorandum of understanding

MSFRIC	Muir S. Fairchild Research Information Center
NAAL	Network of Alabama Academic Libraries
NACES	National Association of Credentials Evaluation Services
NATO	North Atlantic Treaty Organization
NCACS	North Central Association of Colleges and Schools
NCO	noncommissioned officer
NCOA	Noncommissioned Officer Academy
NDU	National Defense University
NMP	nonmaster's program
NRO	National Reconnaissance Office
NSDM	National Security and Decision Making
NSF	National Security Forum
NSPS	National Security Personnel System
NSSI	National Security Space Institute
OLMP	Online Master's Program
OMS	officer military schools
OTS	Officer Training School
pBT	paper-based testing
PACOM	Pacific Command
PCE	professional continuing education
PMCC	Professional Military Comptroller Course
PME	professional military education
POLAD	political advisor
PSP	professional studies paper
PSYOP	psychological operations
PT	practice teaching
RCOT	Reserve Commissioned Officer Training
RCS	regional and cultural studies
RFCC	Reserve Forces Comptroller Course
SAAS	School of Advanced Airpower Studies
SAASS	School of Advanced Air and Space Studies
SACS	Southern Association of Colleges and Schools
SAF	Secretary of the Air Force

SAW	School of Advanced War Fighting
SC	Solo Challenge
SCI	sensitive compartmented information
SES	Senior Executive Service
SIMWAR	simulated warfare
SIWAC	Senior Information Warfare Applications Course
SJIOCAC	Senior Joint Information Operations Applica- tions Course
SNCOA	AF Senior Noncommissioned Officer Academy
SOC	Squadron Officer College
SOCOM	US Special Operations Command
SOD	special operations division
SOF	special operations forces
SORTS	status of resource and training system
SOS	Squadron Officer School
SPDP	Space Professional Development Program
SSO	Special Security Office
SSTR	security, stability, transition, and reconstruction
STRATCOM	US Strategic Command
T&E	test and evaluation
TAFCS	total active federal commission service
TEC	training and education center
TFCSD	total commissioned service to date
TMP	test management project
TOEFL	Test of English as a Foreign Language
TPAE	Theories and Principles of Adult Education
TPFDD	time-phased force and deployment data
TPS	Test Pilot School
UAS	unmanned aircraft system
UCMJ	Uniform Code of Military Justice
UK	United Kingdom
UN	United Nations
US	United States
USC	<i>United States Code</i>
USAF	United States Air Force
USAFTPS	United States Air Force Test Pilot School
USUHS	Uniformed Services University of the Health Sciences

VISTA	variable-stability in-flight simulator test aircraft
VSS	Variable Stability System
WA	War-fighting Applications Directorate
WAPS	Weighted Airmen Promotion System
WE	War-fighting Education
WMD	weapons of mass destruction
XNBP	Exercise in National Budget Priorities

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